



# CHILWA MINERALS

**CHILWA MINERALS LIMITED**  
**ACN 656 965 589**

## **PROSPECTUS**

For an offer of 40,000,000 Shares at an issue price of \$0.20 per Share to raise \$8,000,000 (before Offer costs) (**Offer**).

The Offer is conditional upon satisfaction of the conditions, which are detailed further in Section 2.7. No Shares will be issued pursuant to this Prospectus until those conditions have been met.

The Offer is not underwritten.

**Lead Manager**

**sequoia**

CORPORATE FINANCE

ACN 602 219 072

### **IMPORTANT INFORMATION**

This is an important document that should be read in its entirety. If you do not understand it, you should consult your professional advisers without delay. The Shares offered by this Prospectus should be considered highly speculative.

## **CORPORATE DIRECTORY**

### **Directors**

Philip Lucas (Non-Executive Chairman)  
Cadell Buss (Managing Director)  
Manuel Mota (Non-Executive Director)  
Alexander Shaw (Non-Executive Director)

### **Company Secretary**

John Lewis

### **Lead Manager**

Sequoia Corporate Finance Pty Ltd  
Level 8, 525 Flinders Street  
Melbourne  
Victoria 3000

### **Independent Accountant**

Stantons Corporate Finance Pty Ltd  
Level 2, 40 Kings Park Road  
West Perth WA 6005

### **Auditor\***

PKF Perth  
Level 5,35 Havelock Street  
West Perth, WA, 6005

### **Registered Office**

Level 9/200 St Georges Terrace  
Perth WA, 6000  
Telephone +61 8 6424 8500

### **Independent Geologist**

AMC Consultants (UK) Limited  
Building 3,  
1st Floor, Concorde Park,  
Concorde Road,  
Maidenhead,  
Berkshire,  
SL6 4BY

### **Solicitors to the Company**

Atkinson Corporate Lawyers  
Level 8, 99 St Georges Terrace  
Perth, Western Australia

Singano Purshotam Law Consultants  
Corner Chilembwe Road and Victoria Avenue  
NBS Building, Level 4, Unit 1  
PO Box 2039  
Blantyre, Malawi

### **Share Registry\***

Automic Pty Ltd  
Level 5, 126 Phillip Street  
Sydney, NSW, 2000

### **Independent Expert**

BDO Corporate Finance (WA) Pty Ltd  
Level 9, Mia Yellagonga Tower 2  
5 Spring Street, Perth, WA 6000

\* This entity is included for information purposes only. It has not been involved in the preparation of this Prospectus.

## INDICATIVE TIMETABLE

Lodge Prospectus with ASIC	5 April 2023
Exposure Period ends	14 April 2023
Opening Date	17 April 2023
Closing Date	5.00pm (WST) on 5 May 2023
Securities issued under Prospectus	19 May 2023
Despatch of holding statements	22 May 2023
Expected Quotation Date	26 May 2023

### Notes

- The above dates are indicative only and may change without notice. The Company reserves the right to extend the Closing Date or close the Offer early without notice. If you wish to submit an application and subscribe for Shares under the Offer (and are eligible to do so), you are encouraged to do so as soon as possible after the Offer opens as the Offer may close at any time without notice. The Opening Date will be affected by any extension of the Exposure Period. For further information on the Exposure Period, please refer to the "Important Notices" below.*
- If the Offer is cancelled or withdrawn before completion of the Offer, then all application monies will be refunded in full (without interest) as soon as possible in accordance with the requirements of the Corporations Act. Investors are encouraged to submit their applications as soon as possible after the Offer opens.*

## KEY OFFER DETAILS

	Minimum Subscription
Price per Share	\$0.20
Shares offered	40,000,000
Amount to be raised under the Offer (before costs)	\$8,000,000
Shares issued to Vendor of the Project	19,000,000
<b>Total Shares on issue on completion of the Offer</b>	<b>67,200,001</b>
Total Options on issue on completion of the Offer	3,000,000
Total Performance Rights on issue on completion of the Offer	25,000,000
<b>Implied market capitalisation on completion of the Offer<sup>1</sup></b>	<b>\$13,440,000</b>

### Note

- This assumes a Share price of \$0.20 and is on an undiluted basis.*

## IMPORTANT NOTICE

This Prospectus is dated 5 April 2023 and was lodged with ASIC on that date.

ASIC, ASX and their respective officers take no responsibility for the contents of this Prospectus or the merits of the investment to which this Prospectus relates.

No securities may be issued on the basis of this Prospectus later than 13 months after the date of this Prospectus.

No person is authorised to give information or to make any representation in connection with this Prospectus, which is not contained in the Prospectus. Any information or representation not so contained may not be relied on as having been authorised by the Company in connection with this Prospectus.

It is important that you read this Prospectus in its entirety and seek professional advice where necessary. The Shares the subject of this Prospectus should be considered highly speculative.

### EXPOSURE PERIOD

The Corporations Act prohibits the Company from processing applications in the 7-day period after the date of lodgement of the Prospectus pursuant to section 727(3) of the Corporations Act (**Exposure Period**).

This Prospectus will be circulated during the Exposure Period. The purpose of the Exposure Period is to enable this Prospectus to be examined by market participants prior to the raising of funds. Potential investors should be aware that this examination may result in the identification of deficiencies in the Prospectus and in those circumstances, any application that has been received may need to be dealt with in accordance with section 724 of the Corporations Act.

Application for Shares under this Prospectus will not be processed by the Company until after the expiry of the Exposure Period. No preference will be conferred on persons who lodge application prior to the expiry of the Exposure Period.

### WEB SITE – ELECTRONIC PROSPECTUS

A copy of this Prospectus can be downloaded from the website of the Company at [www.chilwaminerals.com.au](http://www.chilwaminerals.com.au). If you are accessing the electronic version of this Prospectus for the purpose of making an investment in the Company, you must be an Australian resident and must only access this Prospectus from within Australia.

The Corporations Act prohibits any person passing onto another person an Application Form unless it is attached to a hard copy of this Prospectus, or it accompanies the complete and unaltered version of this Prospectus. You may obtain a hard copy of this Prospectus free of charge by contacting the Company.

The Company reserves the right not to accept an Application Form from a person if it has reason to believe that when that person was given access to the electronic Application Form, it was not provided together with the electronic Prospectus and any relevant supplementary or replacement prospectus or any of those documents were incomplete or altered.

Other than as otherwise stated in this Prospectus, no document or information included on our website is incorporated by reference into this Prospectus.

### NO COOLING-OFF RIGHTS

Cooling-off rights do not apply to an investment in Shares issued under the Prospectus. This means that, in most circumstances, you cannot withdraw your application once it has been accepted.

### NO INVESTMENT ADVICE

The information contained in this Prospectus is not financial product advice or investment advice and does not take into account your financial or investment objectives, financial situation or particular needs (including financial or taxation issues). You should seek professional advice from your accountant, financial adviser, stockbroker, lawyer or other professional adviser before deciding to subscribe for Shares under this Prospectus to determine whether it meets your objectives, financial situation and needs.

### CURRENCY

Unless otherwise stated, references to “\$” are references to Australian dollars.

### FOREIGN JURISDICTIONS

This Prospectus does not constitute an offer in any place in which, or to any person to whom, it would not be lawful to make such an offer. No action has been taken to register or qualify the securities or to otherwise permit a public offering of the Shares in any jurisdiction outside Australia.

The distribution of this Prospectus outside Australia may be restricted by law and persons who come into possession of this Prospectus outside Australia should observe any such restrictions. Any failure to comply with such restrictions may constitute a violation of applicable securities laws. Applicants who are resident in countries other than Australia should consult their professional advisers as to whether any governmental or other consents are required or whether any other formalities need to be considered and followed.

In particular, this document may not be distributed to any person, and the Shares may not be offered or sold, in any country outside Australia except in the jurisdictions noted below:

- Canada;
- United Kingdom;
- Singapore;
- Hong Kong;
- Portugal; and
- United Arab Emirates.

Please see Section 2.16 below for further information.

### FORWARD-LOOKING STATEMENTS

This Prospectus contains forward-looking statements which are identified by words such as ‘may’, ‘could’, ‘believes’, ‘estimates’, ‘targets’, ‘expects’, or ‘intends’ and other similar words that involve risks and uncertainties.

These statements are based on an assessment of present economic and operating conditions, and on a number of



assumptions regarding future events and actions that, as at the date of this Prospectus, are expected to take place.

Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of our Company, the Directors and our management.

The Company cannot and does not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this Prospectus will actually occur and investors are cautioned not to place undue reliance on these forward-looking statements.

The Company has no intention to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this Prospectus, except where required by law.

These forward-looking statements are subject to various risk factors that could cause our actual results to differ materially from the results expressed or anticipated in these statements. These risk factors are set out in Section 6 of this Prospectus.

#### **COMPETENT PERSON STATEMENT**

The information in this Prospectus (including the Independent Geologist's Report in Annexure A of this Prospectus) that relates to exploration targets, exploration results and resource estimates is based on information compiled by Mark Burnett, a competent person who is a fellow of the Geological Society of London and is an employee of AMC Consultants (UK) Limited. Mark Burnett is not an employee or Shareholder of the Company and has no conflict of interest. Mark Burnett has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the JORC Code. Mark Burnett consents to the inclusion in the Independent Geologist's Report and the matters based on his work in the form and context in which it appears.

#### **CONTINUOUS DISCLOSURE OBLIGATIONS**

Following admission of the Company to the Official List, the Company will be a "disclosing entity" (as defined in section 111AC of the Corporations Act) and, as such, will be subject to regular reporting and disclosure obligations. Specifically, like all listed companies, the Company will be required to continuously disclose any information it has to the market which a reasonable person would expect to have a material effect on the price or value of the Shares.

Price sensitive information will be publicly released through ASX before it is disclosed to Shareholders and market participants. Distribution of other information to Shareholders and market participants will also be managed through disclosure to the ASX. In addition, the Company will post this information on its website after the ASX confirms an announcement has been made, with the aim of making the information readily accessible to the widest audience.

#### **PRIVACY STATEMENT**

If you complete an Application Form, you will be providing personal information to the Company. The Company collects, holds and will use that information to assess your application, service your needs as a Shareholder and to facilitate distribution payments and corporate communications to you as a Shareholder.

The information may also be used from time to time and disclosed to persons inspecting the register, including bidders for your securities in the context of takeovers, regulatory bodies including the Australian Taxation Office, authorised securities brokers, print service providers, mail houses and the share registry.

You can access, correct and update the personal information that we hold about you. If you wish to do so, please contact the share registry at the relevant contact number set out in this Prospectus.

Collection, maintenance and disclosure of certain personal information are governed by legislation including the *Privacy Act 1988* (Cth), the Corporations Act and certain rules such as the ASX Settlement Operating Rules. You should note that if you do not provide the information required on the application for Shares, the Company may not be able to accept or process your application.

#### **PHOTOGRAPHS AND DIAGRAMS**

Photographs used in this Prospectus which do not have descriptions are for illustration only and should not be interpreted to mean that any person shown endorses the Prospectus or its contents or that the assets shown in them are owned by the Company. Diagrams used in this Prospectus are illustrative only and may not be drawn to scale.

#### **ENQUIRIES**

If you are in any doubt as to how to deal with any of the matters raised in this Prospectus, you should consult with your broker, or legal, financial or other professional adviser without delay. Should you have any questions about the Offer or how to accept the Offer, please call Chilwa Minerals Limited on +61 8 6424 8500.

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## CHAIRMAN'S LETTER

Dear Investor

On behalf of the Board of Directors of Chilwa Minerals Limited ACN 656 965 589 (**Chilwa** or the **Company**), I am pleased to invite you to participate in this Offer to become a Shareholder of Chilwa and be part of the next phases in the Company's business growth.

This Prospectus is issued for the purpose of supporting an application to list the Company on the Official List of the ASX and contains detailed information about the Company, its business, and the Offer, as well as the risks of investing in the Company, and I encourage you to read it carefully.

Chilwa is a public company that has been incorporated for the purpose of acquiring the Lake Chilwa Heavy Minerals Sands Project (**Project**), which comprises a total land area of 878.7km<sup>2</sup> and, through the Offer under this Prospectus, to seek a listing on the ASX.

The Project comprises 2 licences with a total land area of 878.7km<sup>2</sup> and includes a JORC 2012 compliant Mineral Resource Estimate (**MRE**), classified at the Inferred level of confidence of 2.4 MT Total Heavy Minerals (**THM**) and is prospective for further mineralisation in both the existing as well as previously unexplored areas of the licences.

The Board believes the Project represents an exciting opportunity for growth and our view is firmly forward, we will leverage our expertise and industry experience to build value in Chilwa.

Funds raised via this Offer will be directed towards physical on ground exploration coupled with the evaluation of technical opportunities in order to fast track Project development.

The Shares offered by this Prospectus should be considered highly speculative, and an investment in the Company is subject to a number of risks. These risks are set out in Section 6 of this Prospectus, including (but are not limited to) the explorational stage of the Project, the risks of operating in Africa and the number of Performance Rights on issue that, if converted to Shares, may significantly dilute existing Shareholders.

On behalf of the Board, I invite you to become a Shareholder in Chilwa and to share a part of this exciting investment opportunity.

Yours faithfully

Philip Lucas  
Chairman  
**Chilwa Minerals Limited**

## 1. INVESTMENT OVERVIEW

This Investment Overview contains a summary of what the Directors consider to be key information with respect to the Company and the Offer. It is not a summary of this Prospectus.

If you are considering an investment in the Company, it is important that you read this Prospectus carefully, in its entirety and seek professional advice where necessary before deciding to invest in the Company. In particular, in considering the prospects for the Company, you should consider the risk factors that could affect the performance of the Company. The Offer does not take into account your investment objectives, financial situation and particular needs. Accordingly, you should carefully consider the risk factors in light of your personal circumstances and seek professional advice from your accountant, stockbroker, lawyer or other professional adviser before deciding whether to invest. The Shares that are offered under this Prospectus should be considered speculative.

### 1.1 Introduction

Question	Answer	Section
Who is Chilwa Minerals Limited?	<p>Chilwa Minerals Limited ACN 656 965 589 (<b>Chilwa</b> or the <b>Company</b>) was incorporated on 1 February 2022.</p> <p>The Company was formed for the purpose of acquiring the Lake Chilwa Heavy Mineral Sands Project in Malawi, Africa (<b>Project</b>) from Luso Global Mining BV (<b>Luso</b>). The acquisition of the Project will be made pursuant to a share sale agreement (<b>Share Sale Agreement</b>) with Luso and Mota-Engil Investments (Malawi) Limited (<b>MEIML</b>) (a subsidiary of Luso) whereby the Company agreed to purchase 100% of the issued share capital in Chilwa Minerals Africa Limited (<b>CMA</b>), an entity incorporated in Malawi, which will hold the Tenements that comprise the Project.</p> <p>For further information in relation to the Share Sale Agreement please refer to Section 7.2.</p> <p>Both Luso and MEIML form part of the Mota-Engil Group (<b>ME Group</b>) – a Portuguese multinational organisation with operations spanning 3 continents and 28 countries that focuses on construction and infrastructure management in areas that include energy and mining. A consequence of the Share Sale Agreement is that the ME Group will hold approximately 30.6% of the Company's issued shares upon listing, and a further 18.75 million Performance Rights that vest upon milestones linked to the Project being met.</p> <p>The Company and members of the ME Group are parties to the Services Agreement and the Drilling Agreement. See Sections 7.3 and 7.4 for further information.</p> <p>For further information in relation to Luso, MEIML and the ME Group, please refer to Section 2.10.</p> <p>Since incorporation, the Company has focused on:</p> <ul style="list-style-type: none"><li>(a) securing and negotiating its investment in the Project;</li><li>(b) assembling a highly skilled and experienced management team; and</li><li>(c) defining an exploration program for the Project.</li></ul> <p>As a mineral exploration company, the Company will look to deliver growth and value for Shareholders through achieving exploration success from exploration and evaluation programs.</p>	3.1
What is the purpose of this	The purpose of the Offer is to:	2.6

Question	Answer	Section
Prospectus and the Offer?	<p>(a) raise \$8,000,000 before costs which will be used to finance:</p> <ul style="list-style-type: none"> <li>(i) exploration and development expenses on the Project;</li> <li>(ii) general working capital requirements including corporate overhead and administration costs; and</li> <li>(iii) the costs of the Offer; and</li> </ul> <p>(b) meet the requirements of the ASX and satisfy Chapters 1 and 2 of the ASX Listing Rules to enable the Company to list on the ASX and thereby provide a market for Shares and better enable the Company to access capital markets.</p> <p>On completion of the Offer, the Board believes the Company will have sufficient working capital to achieve its stated objectives.</p>	

## 1.2 Business and Project overview

Question	Answer	Section
What is the Company's Project and where is it located?	<p>The Company has entered into the Share Sale Agreement to acquire 100% of the Project from Luso, through the acquisition of CMA.</p> <p>The Project is located around the northern, western and southern shores of Lake Chilwa in southern Malawi.</p> <p>Previous exploration work carried out by MEIML identified 4 main deposits:</p> <ul style="list-style-type: none"> <li>(a) Halala/Namanja;</li> <li>(b) Mposa;</li> <li>(c) Bimbi; and</li> <li>(d) Mpyupyu,</li> </ul> <p>within the initial licence's 407km<sup>2</sup> area. An unexplored extension to the south and a new area of Chilwa Island has been granted covering a further 471.7km<sup>2</sup>, taking the total area to 878.7 km<sup>2</sup>.</p> <p>The Project currently has a JORC 2012 Inferred resource of 2.4 MT THM at a 1% cut-off.</p> <p>The Company proposes a \$4.5 million 2-year exploration program to both potentially increase and better define the current resource and progress studies with a view to looking to develop the Project into commercial production.</p> <p><b>Share Sale Agreement</b></p> <p>The Company has entered into the Share Sale Agreement under which it will acquire 100% of the issued share capital in CMA, an entity incorporated in Malawi that will hold the exploration licences EL0670/22 and EL0671/22, which are granted over the area of the Project, together with all associated geological and other information associated with the Project.</p> <p>The acquisition of the Project is subject to the satisfaction of several conditions, including the Company satisfying all the conditions associated with the quotation of its securities on the ASX.</p>	3.3

Question	Answer	Section
	A summary of the Share Sale Agreement is contained in Section 7.2.	
What is the Company's strategy and intentions?	<p>Following completion of the Offer, the Company's strategy and intentions will be to focus on exploration and potential development of the Project.</p> <p>The primary vision of the Company is to successfully discover and delineate high-grade, economic Heavy Mineral Sands (<b>HMS</b>) deposit that has the potential to be developed into a mine, delivering growth and value for Shareholders.</p> <p>The Company proposes to fund its exploration activities over the first two years following listing on the ASX as outlined in the table at Section 3.4.</p> <p>An explanation of the Company's proposed exploration program post listing on the ASX is provided at Section 3.3(f).</p>	3.3(f) and 3.4
What are the Company's key dependencies?	<p>The key dependencies which underpin the Company's strategy and plans outlined above include:</p> <ul style="list-style-type: none"> <li>(a) closing the Offer and successfully raising \$8,000,000 before costs;</li> <li>(b) acquiring the Project by completing under the Share Sale Agreement (which is a condition of the Offer);</li> <li>(c) successfully undertaking exploration and studies on the Project;</li> <li>(d) prevailing market prices for HMS and the capital and operating costs in producing HMS; and</li> <li>(e) the Company's ability to secure further funds for continued exploration and the development the Project.</li> </ul>	2.9, 3.3(f) and 3.4
Independent Expert's Report	<p>For the purposes of ASX Guidance Note 19, this Prospectus includes an Independent Expert's Report prepared by BDO Corporate Finance (WA) Pty Ltd (<b>BDO</b>) and which opines on the fairness and reasonableness of the Performance Rights to be issued to Luso and Directors and Management of the Company.</p> <p>BDO have opined that the Performance Rights are not fair but reasonable to non-participating security holders.</p>	Annexure C

### 1.3 Key Investment Highlights and Risks

Question	Answer	Section
What are the perceived investment highlights and benefits?	<p>The Directors are of the view that an investment in the Company provides the following non-exhaustive list of advantages:</p> <ul style="list-style-type: none"> <li>(a) the Board considers that HMS deposits include minerals that, in addition to their current industrial applications, will also have an important application in products that are used in the transition to clean energy manufacturing;</li> <li>(b) subject to completing the Offer, the Company will have sufficient funds to implement its proposed exploration program;</li> </ul>	3.3, 3.4 and 4

Question	Answer	Section
	<p>(c) due to previous work conducted on the Project, the Company will acquire a project considered by the Board to be highly prospective for mineralisation;</p> <p>(d) The ME Group, who is a 30.6% Shareholder in the Company, has significant in-country experience and expertise. The Company will be able to leverage off this considerable resource;</p> <p>(e) a highly credible and experienced management team to progress exploration and accelerate potential development of the Project; and</p> <p>(f) the Board considers that the Project, and the resources industry generally, has the potential to provide an attractive long-term return to prospective investors.</p>	
<p>What are the key investment risks?</p>	<p>The business, assets and operations of the Company are subject to certain risk factors that have the potential to influence the operating and financial performance of the Company in the future. These risks can impact on the value of an investment in the securities of the Company.</p> <p>The Board aims to manage these risks by carefully planning its activities and implementing risk control measures. Some of the risks are, however, highly unpredictable and the extent to which they can effectively be managed is limited.</p> <p><b>Other industry specific risks</b></p> <p>The Company's activities are subject to a number of risks common to the conduct of mining exploration and the financing of mining exploration activities, including but not limited to:</p> <p><b>General risks associated with operating overseas</b></p> <p>The Company conducts and has its exploration operations in Malawi. Consequently, the Company will be subject to the risks associated with operating in Malawi. Such risks can include economic, social or political instability or change, inflation, currency non-convertibility or instability and changes of law affecting foreign ownership, government participation, taxation, working conditions, rates of exchange, exchange control, exploration licensing, export duties, repatriation of income or return of capital, environmental protection, mine safety, labour relations as well as government control over mineral properties or government regulations.</p> <p>Changes to mining or investment policies and legislation or a shift in political attitude may adversely affect the Company's operations and profitability.</p> <p><b>Exploration risks</b></p> <p>The Project currently has a JORC 2012 Inferred resource of 2.4 MT THM at a 1% cut-off and is considered prospective for further mineralisation in both existing as well as previously unexplored areas of the licences. However, there is significant risk that further exploration may not be successful or may be delayed and cost more than currently anticipated.</p>	<p>6</p>

Question	Answer	Section
	<p><b>Control</b></p> <p>Upon listing, the ME Group will hold 20.6 million Shares, or approximately 30.6% of the Company's issued Shares. It will also have two nominees on the Board (being Messrs Mota and Shaw).</p> <p>The ME Group will also hold 18.75 million Performance Rights. Whilst these Performance Rights vest upon milestones being reached, they will only convert to Shares in circumstances that the ME Group either does not increase its voting power, or does so using the "3% creep" exception to the prohibition in the Corporations Act to a person increasing their voting power over 20%. The maximum voting power the ME Group could acquire, assuming all convertible securities vest and no other Shares are issued and subject to the Corporations Act, is approximately 41.33%.</p> <p>Subject to the number (by Shares held) of Shareholders who vote at a general meeting of Shareholders, the ME Group will not be able to determine the vote at Shareholder meetings. However, the ME Group will by virtue of its shareholding have some ability to control the outcome of meetings of Shareholders. Furthermore, under the Share Sale Agreement, the ME Group will have the right to appoint up to two of the four board nominees to the board of the Company and although these nominees may not be able to approve resolutions of the Board of the Company, where all Directors are entitled to participate, they may be able to block any resolution where its nominees are entitled to vote. These circumstances may lead to the Company not being able to implement its strategies and objectives for so long as the ME Group or its board nominees vote contrary to the recommendations of the remaining Directors of the Company. For further information in relation to the ME Group's right to appoint board nominees please refer to Section 7.2.</p> <p>To assist in managing the above implications, the Company appointed an experienced Chairman (Mr Lucas) and will comply with the requirements of the Corporations Act and the ASX Listing Rules with respect to dealings between the Company and the ME Group. Mr Lucas is chairman and a partner at the boutique law firm Allion Partners and, going forward, is considered by the Board to be independent. For further information in relation to Mr Lucas' interests in his capacity as chairman and partner of Allion Partners please refer to Section 8.8.</p> <p>For further information in relation to Luso, MEIML and the ME Group, please refer to Section 2.10.</p> <p><b>Dilution</b></p> <p>Upon listing, the Company will have on issue 25 million Performance Rights (18.75 million of which will be held by the ME Group) and 3 million Options. In the event these securities convert to Shares and no other Shares are issued (an outcome the Directors consider unlikely given the nature of the Performance Right hurdles, including Class D Hurdle announcing a decision to mine), Shareholders will be diluted by approximately 30%.</p> <p><b>Legal environment</b></p> <p>The legal systems in some overseas countries may be less developed than more established countries and this could result in the following risks:</p>	



Question	Answer	Section
	<p>(a) political difficulties in obtaining effective legal redress in the courts whether in respect of a breach of law or regulation or in an ownership dispute;</p> <p>(b) a higher degree of discretion held by various government officials or agencies;</p> <p>(c) the lack of political or administrative guidance on implementing applicable rules and regulations, particularly in relation to taxation and property rights;</p> <p>(d) inconsistencies or conflicts between and within various laws, regulations, decrees, orders and resolutions; or</p> <p>(e) relative inexperience of the judiciary and court in matters affecting the Company.</p> <p><b>Sovereign risk</b></p> <p>Malawi is subject to differing legal and political systems, when compared with the systems in place in Australia.</p> <p>Possible risks include, without limitation, changes in the terms of mining legislation, changes to royalty arrangements, changes to taxation rates and concessions and changes in the ability to enforce legal rights. Any of these factors may, in the future, adversely affect the financial performance of the Company and the market price of its Shares.</p> <p><b>Title risks</b></p> <p>The Project in which the Company has an interest is subject to the relevant conditions applying to the jurisdiction where it is located. Failure to comply with these conditions may render the Project or the License liable for forfeiture.</p> <p>The License will be subject to application for renewal from time to time. Renewal of the term of the License is subject to applicable legislation. If the License is not renewed for any reason, the Company may suffer significant damage through loss of the opportunity to develop and discover any mineral resources on the Project.</p> <p><b>Contractual risks</b></p> <p>The ability of the Company to achieve its objectives will depend on the performance by the counterparties to any agreements that the Company may enter into. If any counterparty defaults in the performance of their obligations, it may be necessary for the Company to approach a court to seek a legal remedy. Legal action can be costly. Furthermore, certain contracts to which the Company is a party may be governed by laws of jurisdictions outside Australia. There is a risk that the Company may not be able to seek the legal redress that it could expect under Australian law and generally there can be no guarantee that a legal remedy will ultimately be granted on the appropriate terms.</p> <p>The Company has entered into a Drilling Contract with Mota-Engil Engenharia e Construção África, S.A. (<b>ME Africa</b>), a member of the ME Group, for the provision of drilling and related services. In the event that ME Africa cannot comply with the terms of the contract there may be delays associated with obtaining another supplier in Malawi that could result in additional costs and delays to the Company with a consequential impact on exploration timing and</p>	

Question	Answer	Section
	<p>budgets. Furthermore, the Drilling Contract is governed by the laws applicable in Malawi and there can be no certainty that, in the event of a dispute, an appropriate remedy can be sought or obtained in a timely manner. For further information please refer to Section 7.4.</p> <p>The Company will enter into the Services Agreement with ME Africa and CMA for the provision of certain mining services relating to the Project. Under the Services Agreement, ME Africa has a right to negotiate with the Company regarding contracts that the Company may wish to enter into in relation to the Project. For further information please refer to Section 7.3.</p> <p><b>Health, safety and the environment</b></p> <p>The conduct of business in the resources sector involves a variety of risks to the health and safety of personnel and to the environment. If it is conceivable that an incident may occur which might negatively impact on the Company's business.</p> <p><b>Economic conditions and other global or national issues</b></p> <p>General economic conditions, laws relating to taxation, new legislation, trade barriers, movements in interest and inflation rates, currency exchange controls and rates, national and international political circumstances (including outbreaks in international hostilities, wars, terrorist acts, sabotage, subversive activities, security operations, labour unrest, civil disorder, and states of emergency), natural disasters (including fires, earthquakes and floods), and quarantine restrictions, epidemics and pandemics, may have an adverse effect on the Company's operations and financial performance, including the Company's exploration, development and production activities, as well as on its ability to fund those activities.</p> <p>General economic conditions may also affect the value of the Company and its market valuation regardless of its actual performance. Specifically, it should be noted that the current evolving conflict between Ukraine and Russia is impacting global macroeconomics and financial markets generally. The nature and extent of the effect of this conflict on the performance of the Company and the value of the Shares remains unknown.</p> <p>The trading price of the Shares may also be adversely affected in the short to medium term by the economic uncertainty caused by the conflict between Ukraine and Russia and overall impacts on global macroeconomics. Given the situation is continually evolving, the outcomes and consequences are inevitably uncertain.</p>	

## 1.4 Financial information

Question	Answer	Section
What is the Company's financial position?	<p>Following completion of the Offer the Company is expected to have available cash of approximately \$7,179,360 from funds raised under the Offer of \$8,000,000 after deducting the Lead Manager Fees and the costs of the Offer.</p> <p>The Board is satisfied that upon successful completion of the Offer, the Company will have sufficient working capital to meet its stated objectives.</p>	5
Will the Company pay dividends?	<p>Payment of dividends by the Company is at the discretion of the Board. Given the stage of development of the Company, the Board anticipates that significant expenditure will be incurred in the evaluation and development of the Company's Project.</p> <p>These activities are expected to dominate at least the first two-year period following the Company's listing on the ASX. Accordingly, the Directors have no current intention to declare and pay a dividend and no dividends are expected to be paid during the foreseeable future following the Company's listing on the ASX.</p> <p>In determining whether to declare future dividends, the Directors will consider the level of earnings of the Company, the operating results and overall financial condition of the Company, future capital requirements, capital management initiatives, general business outlook and other factors the Directors may consider relevant at the time of their decision.</p> <p>The Directors cannot and do not provide any assurances in relation to the future payment of dividends.</p>	3.6

## 1.5 Shareholders, Directors and Key management

Question	Answer	Section
Who are the substantial shareholders in the Company?	<p>Following completion of the Offer the ME Group will be a substantial shareholder in the Company with 30.6% of the Shares on issue, on an undiluted basis.</p> <p>On a fully diluted basis, (and assuming all Performance Rights and Options are exercised but no other Shares are issued) the ME Group will hold, subject to the Corporations Act, 41.33% of the Shares on issue.</p>	2.10
Who are the Directors and key managers?	<p>The Directors and officers of the Company are:</p> <ul style="list-style-type: none"> <li>(a) Philip Lucas (Non-Executive Chairman);</li> <li>(b) Cadell Buss (Managing Director);</li> <li>(c) Alexander Shaw (Non-Executive Director);</li> <li>(d) Manuel Mota (Non-Executive Director); and</li> <li>(e) John Lewis (CFO/Company Secretary).</li> </ul> <p>Please see Section 4 for further information.</p>	4

Question	Answer	Section																		
<p>What are the interests of the Directors in the Company?</p>	<p>The officers and their associates have the following equity interests in the Company as at the completion of the Offer:</p> <table border="1"> <thead> <tr> <th>Officers</th> <th>Shares</th> <th>Performance Rights</th> </tr> </thead> <tbody> <tr> <td>Philip Lucas (Non-Executive Chair)</td> <td>Nil</td> <td>1,350,000</td> </tr> <tr> <td>Cadell Buss (Managing Director)</td> <td>100,001</td> <td>4,400,000</td> </tr> <tr> <td>Alexander Shaw (Non-Executive Director)<sup>1</sup></td> <td>200,000</td> <td>Nil</td> </tr> <tr> <td>Manuel Mota (Non-Executive Director)<sup>2</sup></td> <td>250,000</td> <td>Nil</td> </tr> <tr> <td>John Lewis (Company Secretary)</td> <td>100,000</td> <td>350,000</td> </tr> </tbody> </table> <p><b>Notes:</b></p> <p>1 Alexander Shaw is an employee of Luso. Luso (as a member of the ME Group) will hold an interest of 30.6% of the Company on listing on ASX. Please see Section 2.10 for further information.</p> <p>2 Manuel Mota is an employee of the ME Group and the Chairman of Luso. Luso (as a member of the ME Group) will hold an interest of 30.6% of the Company on listing on ASX. Please see Section 2.10 for further information.</p>	Officers	Shares	Performance Rights	Philip Lucas (Non-Executive Chair)	Nil	1,350,000	Cadell Buss (Managing Director)	100,001	4,400,000	Alexander Shaw (Non-Executive Director) <sup>1</sup>	200,000	Nil	Manuel Mota (Non-Executive Director) <sup>2</sup>	250,000	Nil	John Lewis (Company Secretary)	100,000	350,000	8.6
Officers	Shares	Performance Rights																		
Philip Lucas (Non-Executive Chair)	Nil	1,350,000																		
Cadell Buss (Managing Director)	100,001	4,400,000																		
Alexander Shaw (Non-Executive Director) <sup>1</sup>	200,000	Nil																		
Manuel Mota (Non-Executive Director) <sup>2</sup>	250,000	Nil																		
John Lewis (Company Secretary)	100,000	350,000																		
<p>What payments and benefits are to be made or given to the Directors?</p>	<p>Details of the Directors' remuneration upon completion of the Offer are set out in the table below:</p> <table border="1"> <thead> <tr> <th>Director</th> <th>Proposed annual remuneration for year ending 30 June 2023<sup>1</sup></th> <th>Proposed annual remuneration for year ending 30 June 2024<sup>1</sup></th> </tr> </thead> <tbody> <tr> <td>Cadell Buss</td> <td>\$77,083<sup>2</sup></td> <td>\$300,000<sup>5</sup></td> </tr> <tr> <td>Philip Lucas</td> <td>\$13,333<sup>3, 4</sup></td> <td>\$80,000</td> </tr> <tr> <td>Manuel Mota</td> <td>\$6,666<sup>4</sup></td> <td>\$40,000</td> </tr> <tr> <td>Alexander Shaw</td> <td>\$6,666<sup>4</sup></td> <td>\$40,000</td> </tr> </tbody> </table> <p><b>Notes:</b></p> <p>1. Excludes statutory superannuation (where applicable).</p> <p>2. Mr Buss is also entitled to be paid a bonus of \$140,074 in relation to the Company's admission to the Official List. Please see Section 8.7 for further information.</p> <p>3. Mr Lucas is also entitled to be paid accrued directors fees of \$80,000 for services provided prior to the Company's admission to the Official List. Please see Section 8.7 for further information.</p>	Director	Proposed annual remuneration for year ending 30 June 2023 <sup>1</sup>	Proposed annual remuneration for year ending 30 June 2024 <sup>1</sup>	Cadell Buss	\$77,083 <sup>2</sup>	\$300,000 <sup>5</sup>	Philip Lucas	\$13,333 <sup>3, 4</sup>	\$80,000	Manuel Mota	\$6,666 <sup>4</sup>	\$40,000	Alexander Shaw	\$6,666 <sup>4</sup>	\$40,000	2.9 and 8.7			
Director	Proposed annual remuneration for year ending 30 June 2023 <sup>1</sup>	Proposed annual remuneration for year ending 30 June 2024 <sup>1</sup>																		
Cadell Buss	\$77,083 <sup>2</sup>	\$300,000 <sup>5</sup>																		
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Manuel Mota	\$6,666 <sup>4</sup>	\$40,000																		
Alexander Shaw	\$6,666 <sup>4</sup>	\$40,000																		

Question	Answer	Section
	<p>4. Director's fees for the months of May and June 2023 only.</p> <p>5. Mr Buss is entitled to receive bonus payments for a further \$140,000 subject to the achievement of specified key performance indicators. Please see Section 8.7 for further information.</p> <p>The Directors will also be issued Performance Rights as set out in the above and in Sections 8.6 and 8.7 below.</p>	
<p>What are the significant interests of advisors of the Company?</p>	<p>Sequoia Corporate Finance Pty Ltd (ACN 602 219 072) (<b>Sequoia</b>) will act as Lead Manager to the Offer.</p> <p>The Lead Manager does not currently have an interest in any Securities of the Company.</p> <p>The following fees will be paid to the Lead Manager by the Company:</p> <p>(a) for managing and arranging funds via an equity financing through the offer of shares or other securities to assist the Company's IPO funding requirements, subject to (b) below, a fee of 6% (plus GST) of all funds raised from all sources;</p> <p>(b) where funds committed are a direct result of a pre-existing relationship with the Company (i.e. Chairman's List), a fee of 2% (plus GST) of all funds raised is payable; and</p> <p>(c) conditional upon the Company listing on the ASX, a fee of a total of 3,000,000 unquoted Options, exercisable at the following price in the below quantum:</p> <p>(i) 1,000,000 unquoted Options exercisable at \$0.25;</p> <p>(ii) 1,000,000 unquoted Options exercisable at \$0.30; and</p> <p>(iii) 1,000,000 unquoted Options exercisable at \$0.40,</p> <p>each expiring 4 years from the date of issue of the options.</p> <p>The Company will also reimburse Sequoia for all reasonable costs and expenses it incurs in connection with the engagement. For a period of 12 months from the date of the Company listing on the ASX, Sequoia will act as the Company's exclusive financial advisor for any additional capital raisings in that period.</p> <p>Further, subsequent to the listing, Sequoia will assist the Company with continuing research, which will be charged at \$5,000 per month.</p>	<p>7.5, 8.3 and 8.9</p>
<p>What related party agreements are the Company party to?</p>	<p>The Company is a party to the Share Sale Agreement with Luso and MEIML (who are both members of the ME Group). Please see Section 7.2 for further information on the Share Sale Agreement.</p> <p>The Company will be a party to the Services Agreement with Mota-Engil Engenharia e Construção Africa S.A. (<b>ME Africa</b>) and CMA for the provision of mining services in relation to the Project. Please see Section 7.3 for further information on the Services Agreement.</p> <p>The Company has also entered into the Drilling Contract with ME Africa for the provision of drilling and related services. Please see Section 7.4 for further information.</p>	<p>7 and 8.7</p>

Question	Answer	Section
	The Company has entered into various agreements with the Managing Director and non-executive Directors. Please see Section 8.7 for further information.	

## 1.6 The Offer

Question	Answer	Section																												
What is the Offer?	Under this Prospectus, the Company invites applications for up to 40,000,000 Shares at an issue price of \$0.20 per Share to raise \$8,000,000, before costs.	2.1																												
Oversubscriptions	The Company will not be accepting oversubscriptions.	2.2																												
Is the Offer underwritten?	The Offer is not underwritten.	2.4																												
Who is the Lead Manager?	The Company has appointed Sequoia as lead manager to the Offer. Please see Section 7.5 for the further information.	2.5																												
What are the Securities being offered?	The Offer is an offer of fully paid ordinary shares in the Company (i.e. Shares). A summary of the rights attaching to Shares is set out in Section 8.2.	8.2																												
What will be the capital structure of the Company on completion of the Offer?	<p>The table below sets out the capital structure of the Company after the Offer closes. Upon completion of the Offer, the Shares to be issued under the Offer will comprise 59.52% on an undiluted basis and 42.02% on a fully-diluted basis:</p> <table border="1"> <thead> <tr> <th></th> <th>Shares</th> <th>Options</th> <th>Performance Rights</th> </tr> </thead> <tbody> <tr> <td><b>Existing Shares on issue</b></td> <td>7,550,000<sup>1</sup></td> <td>nil</td> <td>nil</td> </tr> <tr> <td><b>Directors and management</b></td> <td>650,001</td> <td>nil</td> <td>6,250,000<sup>2</sup></td> </tr> <tr> <td><b>Share Sale Agreement<sup>3</sup></b></td> <td>19,000,000</td> <td>nil</td> <td>18,750,000</td> </tr> <tr> <td><b>Lead Manager<sup>4</sup></b></td> <td>nil</td> <td>3,000,000</td> <td>nil</td> </tr> <tr> <td><b>\$8,000,000 capital raise under the Offer</b></td> <td>40,000,000</td> <td>nil</td> <td>nil</td> </tr> <tr> <td><b>Total</b></td> <td><b>67,200,001</b></td> <td><b>3,000,000</b></td> <td><b>25,000,000</b></td> </tr> </tbody> </table> <p><b>Notes:</b></p> <ol style="list-style-type: none"> <li>Excludes Shares held by Directors and management.</li> <li>To be issued to Directors and management. See Sections 7.6, 8.4 and 8.6 for further information.</li> <li>To be issued to Luso (a member of the ME Group). Under the terms of the Share Sale Agreement, Luso has agreed to an escrow of 2 years on all Shares</li> </ol>		Shares	Options	Performance Rights	<b>Existing Shares on issue</b>	7,550,000 <sup>1</sup>	nil	nil	<b>Directors and management</b>	650,001	nil	6,250,000 <sup>2</sup>	<b>Share Sale Agreement<sup>3</sup></b>	19,000,000	nil	18,750,000	<b>Lead Manager<sup>4</sup></b>	nil	3,000,000	nil	<b>\$8,000,000 capital raise under the Offer</b>	40,000,000	nil	nil	<b>Total</b>	<b>67,200,001</b>	<b>3,000,000</b>	<b>25,000,000</b>	2.9
	Shares	Options	Performance Rights																											
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<b>Total</b>	<b>67,200,001</b>	<b>3,000,000</b>	<b>25,000,000</b>																											

Question	Answer	Section																						
	<p>and Performance Rights and a further period of 12 months escrow on 50% of the Shares and Performance Rights issued under the Share Sale Agreement. Please see Section 7.2 for further information.</p> <p>4. To be issued to the Lead Manager. See Sections 7.5 and 8.3 for further information.</p> <p>Please refer to Section 2.9 for further details on the capital structure.</p>																							
<p>How will funds raised from the Offer by used?</p>	<p>The Company intends to use funds raised under the Offer as set out in the table below:</p> <p>(a) to enable its admission to the Official List of ASX;</p> <p>(b) proposed exploration program on the Project;</p> <p>(c) for working capital purposes including to pay for the Company's administration and corporate overheads; and</p> <p>(d) to pay for the costs of the Offer.</p> <p>The above intended uses may be affected by new circumstances and financial requirements that arise. The Board reserves the right to vary the way in which funds are applied.</p> <p>A more detailed use of funds is provided below:</p> <table border="1"> <thead> <tr> <th>Use of funds</th> <th>\$</th> <th>% of funds</th> </tr> </thead> <tbody> <tr> <td>Initial exploration program<sup>1</sup></td> <td>4,500,000</td> <td>55.16</td> </tr> <tr> <td>Working capital including Administration and corporate costs<sup>2</sup></td> <td>2,679,360</td> <td>32.84</td> </tr> <tr> <td>Managing Director's bonus<sup>3</sup></td> <td>140,074</td> <td>1.72</td> </tr> <tr> <td>Estimated cost of the offer<sup>4</sup></td> <td>838,546</td> <td>10.28</td> </tr> <tr> <td>Total<sup>5</sup></td> <td>8,157,980</td> <td>100</td> </tr> </tbody> </table> <p><b>Notes:</b></p> <ol style="list-style-type: none"> <li>1. Initial 2-year exploration program and budget. See Sections 2.8 and 3.4 below for further information.</li> <li>2. Includes direct expenses, among other things, with respect to the directors and management and indirect expenses including, audit, corporate advisory services, share registry services etc.</li> <li>3. Mr Buss will be paid a bonus upon the Company being admitted to the Official List of the ASX. Please see Section 8.7 for further information.</li> <li>4. Includes Lead Manager, legal and technical due diligence costs.</li> <li>5. In addition to the funds raised under the Offer, the total use of funds includes \$157,980 being the balance as at 31 January 2023 of the funds raised by the Company under the Pre-IPO Placement.</li> </ol> <p>The initial Exploration Program and Budget set out below.</p> <table border="1"> <thead> <tr> <th>Activity</th> <th>\$</th> </tr> </thead> <tbody> <tr> <td>Assays &amp; Metallurgical</td> <td>1,394,000</td> </tr> </tbody> </table>	Use of funds	\$	% of funds	Initial exploration program <sup>1</sup>	4,500,000	55.16	Working capital including Administration and corporate costs <sup>2</sup>	2,679,360	32.84	Managing Director's bonus <sup>3</sup>	140,074	1.72	Estimated cost of the offer <sup>4</sup>	838,546	10.28	Total <sup>5</sup>	8,157,980	100	Activity	\$	Assays & Metallurgical	1,394,000	<p>2.8</p>
Use of funds	\$	% of funds																						
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Question	Answer	Section																
	<table border="1"> <tr> <td>Bulk Sampling</td> <td>100,000</td> </tr> <tr> <td>Drilling<sup>1</sup></td> <td>1,608,000</td> </tr> <tr> <td>ESG</td> <td>393,000</td> </tr> <tr> <td>Geological Staff and field technicians</td> <td>559,412</td> </tr> <tr> <td>Infrastructure / Road Cutting</td> <td>160,000</td> </tr> <tr> <td>Radio Metrics</td> <td>95,000</td> </tr> <tr> <td>Resource Model</td> <td>190,588</td> </tr> <tr> <td><b>Total</b></td> <td><b>4,500,000</b></td> </tr> </table> <p><b>Note:</b></p> <p>1. Please see Section 7.4 for further information on the Drilling Contract.</p> <p>Refer to Sections 2.8 and 3.4 for a more detailed budget for the Company's use of funds.</p> <p>The above tables are a statement of current intentions as of the date of this Prospectus. As with any budget, intervening events (including exploration success or failure) and new circumstances have the potential to affect the manner in which the funds are ultimately applied. The Board reserves the right to alter the way funds are applied on this basis.</p> <p>No guarantee can be provided that the Company will not in the future be required to raise additional funds to maintain mining operations or conduct exploration activities to identify a JORC compliant reserve or resource.</p>	Bulk Sampling	100,000	Drilling <sup>1</sup>	1,608,000	ESG	393,000	Geological Staff and field technicians	559,412	Infrastructure / Road Cutting	160,000	Radio Metrics	95,000	Resource Model	190,588	<b>Total</b>	<b>4,500,000</b>	
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<b>Total</b>	<b>4,500,000</b>																	
Will the Shares offered by quoted on ASX?	Yes, a condition of the Offer is that the Shares will be quoted.	2.18																
Is there a minimum subscription requirement to the Offer?	Yes, the Minimum Subscription amount for the Offer is \$8,000,000. Shares will not be issued unless and until Applications for the Minimum Subscription have been received.	2.3																
What are the expenses of the Offer?	<p>The expenses of the Offer will be approximately \$358,546 plus the Lead Manager's fees of \$480,000 and 3 million Options, on the basis of a capital raising of \$8,000,000.</p> <p>The Company has entered an agreement with Sequoia to act as lead manager. Under that agreement Sequoia will receive Options valued using the Black-Scholes method at \$303,611.</p>	8.11																
Will any securities be subject to escrow restrictions?	<p><b>Shares offered under this Prospectus</b></p> <p>Shares issued to applicants under the Offer will not be subject to any escrow restrictions.</p> <p><b>Existing Securities</b></p> <p>Certain Securities outside of the Offer are likely to be classified by the ASX as restricted securities and will be required to be held in</p>	2.12																



Question	Answer	Section								
	<p>escrow for up to 24 months from the date of admission to Official Quotation as a condition of the Company being admitted to ASX.</p> <p>These Securities include the following and are held by Directors and management, Luso (a member of the ME Group), the Lead Manager and other existing Shareholders:</p> <table border="1"> <tr> <td>Held by Directors and management</td> <td>650,001 Shares<sup>1</sup> 6,250,000 Performance Rights<sup>2</sup></td> </tr> <tr> <td>Existing Shareholders (other than Directors and management)</td> <td>2,975,000 Shares<sup>1</sup></td> </tr> <tr> <td>Lead Manager Options</td> <td>3,000,000 Options<sup>3</sup></td> </tr> <tr> <td>Securities issued under the Share Sale Agreement</td> <td>19,000,000 Shares<sup>1, 4</sup> 18,750,000 Performance Rights<sup>2, 4</sup></td> </tr> </table> <p><b>Notes:</b></p> <ol style="list-style-type: none"> <li>Please see Section 8.2 for further information.</li> <li>Please see Sections 8.4 and 8.6 for further information.</li> <li>Please see Section 8.3 for further information.</li> <li>Under the terms of the Share Sale Agreement, Luso has agreed to escrow of 2 years on all Shares and Performance Rights and a further period of 12 months escrow on 50% of the Shares and Performance Rights issued under the Share Sale Agreement. Please see Section 7.2 for further information.</li> </ol>	Held by Directors and management	650,001 Shares <sup>1</sup> 6,250,000 Performance Rights <sup>2</sup>	Existing Shareholders (other than Directors and management)	2,975,000 Shares <sup>1</sup>	Lead Manager Options	3,000,000 Options <sup>3</sup>	Securities issued under the Share Sale Agreement	19,000,000 Shares <sup>1, 4</sup> 18,750,000 Performance Rights <sup>2, 4</sup>	
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Lead Manager Options	3,000,000 Options <sup>3</sup>									
Securities issued under the Share Sale Agreement	19,000,000 Shares <sup>1, 4</sup> 18,750,000 Performance Rights <sup>2, 4</sup>									
Are there any tax consequences?	<p>The acquisition and disposal of Shares will have tax consequences, which will differ depending on the individual financial affairs of each investor. All potential investors in the Company are urged to obtain independent financial advice about the consequences of acquiring Shares from a taxation viewpoint and generally.</p> <p>To the maximum extent permitted by law, the Company, its officers and each of their respective advisors accept no liability and responsibility with respect to the taxation consequences of subscribing for Shares under this Prospectus.</p>	2.20								

## 1.7 Applying for Shares under the Offer

Question	Answer	Section
Who can apply for Shares under the Offer?	Members of the public who have an address in Australia may subscribe for Shares under the Offer. For Applicants who are not Australian residents, please refer to Section 2.16 for details on the offer restrictions applicable to this Offer.	2.14 and 2.16
What is required to apply for Shares under this Prospectus?	<p>This Prospectus is accompanied by an Application Form.</p> <p>An applicant must complete an Application Form accompanying this Prospectus in accordance with the instructions on the Application Form.</p> <p>Applicants may pay by electronic funds transfer (EFT) or using BPAY at the following link: <a href="https://apply.automic.com.au/ChilwaMinerals">https://apply.automic.com.au/ChilwaMinerals</a>.</p>	2.14

Question	Answer	Section
Can an Offer be withdrawn?	The Company reserves the right to withdraw the Offer at any time before the issue of Shares to applicants under the Offer.  If the Offer is withdrawn, application monies will be refunded to applicants in full without interest.	2.1

## 1.8 Further information

Question	Answer
How can further information be obtained?	You should read this Prospectus in full.  If after reading this Prospectus you have any questions or are unsure of what to do to, you should speak to your qualified investment advisor.  Certain information referred to in this Prospectus, including copies of the Company's corporate governance charters and policies, is available on the Company's website at <a href="http://www.chilwaminerals.com.au">www.chilwaminerals.com.au</a>
How can the Company be contacted?	The Company's contact details for enquiries regarding the Offer on this Prospectus are as follows:  By telephone: + 61 8 6424 8500  By email: <a href="mailto:cosec@chilwaminerals.com.au">cosec@chilwaminerals.com.au</a>  By post: Level 9, 200 St Georges Terrace, Perth WA 6000 Attention: Chilwa Minerals Limited – Company Secretary

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## **2. DETAILS OF THE OFFER**

### **2.1 The Offer**

Pursuant to this Prospectus, the Company invites applications for 40,000,000 Shares at an issue price of \$0.20 per Share to raise \$8,000,000, before costs.

The Shares offered under this Prospectus will rank equally with the existing Shares on issue. Further details of the rights attaching to the Shares are set out in Section 8.2.

The Directors may reject any application made under the Offer or allocate fewer Shares than the Applicant has applied for.

The Company reserves the right to withdraw the Offer at any time before Shares are issued under it.

### **2.2 Oversubscriptions**

The Company will not be accepting oversubscriptions.

### **2.3 Minimum Subscription**

If the Minimum Subscription to the Offer of \$8,000,000 has not been raised within 4 months after the date of this Prospectus, the Company will not issue any Shares and will repay all application monies for the Shares within the time prescribed under the Corporations Act, without interest.

### **2.4 Underwriting**

The Offer is not underwritten.

### **2.5 Lead Manager**

The Company has appointed Sequoia Corporate Finance Pty Ltd (**Lead Manager**) as lead manager to the Offer. The Company will pay the Lead Manager the fees set out in Section 7.5 in consideration for these services.

As at the date of this Prospectus, the Lead Manager does not hold any Securities in the capital of the Company.

### **2.6 Purpose of the Offer**

The purpose of the Offer is to:

- (a) raise a minimum of \$8,000,000 (before costs) which will be used to fund:
  - (i) exploration and development expenses on the Project;
  - (ii) general working capital;
  - (iii) including corporate overhead and administration costs;
  - (iv) payment of a bonus to the Managing Director upon the successful listing of the Company on the Official List of the ASX;
  - (v) the costs of the Offer; and
- (b) meet the requirements of the ASX and satisfy Chapters 1 and 2 of the ASX Listing Rules to enable the Company to list on the ASX and thereby provide a market for Shares and better enable the Company to access capital markets.

On completion of the Offer, the Board believes the Company will have sufficient working capital to achieve these objectives.

### **2.7 Conditions of the Offer**

Completion of the Offer under this Prospectus is subject to:

- (a) the Company complying with Chapters 1 and 2 of the ASX Listing Rules;
- (b) completion occurring under the Share Sale Agreement;
- (c) the Company raising a minimum of \$8,000,000 under the Offer, before costs; and

- (d) ASX approving the Company's application for admission to the Official List and the Company receiving conditional approval for quotation of the Company's Shares on ASX.

If these conditions are not met, the Company will not proceed with the Offer and will repay all application monies received, without interest and in accordance with the Corporations Act.

## 2.8 Use of Funds

The Company intends to apply funds raised from the Offer over the first 2 years following admission of the Company to the official list of ASX as follows:

Funds available	Amount
Cash at Bank (31 January 2023)	157,980
Funds from the Offer	\$8,000,000
<b>Total Funds (including cash at hand on 31 January 2023)</b>	<b>\$8,157,980</b>
Exploration of the Project <sup>1</sup>	\$4,500,000
Working capital (including corporate overheads)	\$2,679,360
Managing Director's bonus <sup>2</sup>	\$140,074
Costs of the transaction <sup>3</sup>	\$838,546
<b>Total</b>	<b>\$8,157,980</b>

**Notes:**

- 1 Please see Section 3.4 for details on proposed exploration expenditure for the first 2 years.
- 2 Please see Section 8.7 for details of the Director's remuneration.
- 3 Please see Section 8.11 for further information on costs of the Offer.

The above table is a statement of current intentions as of the date of this Prospectus. As with any budget, intervening events (including exploration success or failure) and new circumstances have the potential to affect the manner in which the funds are ultimately applied. The Board reserves the right to alter the way funds are applied on this basis.

No guarantee can be provided that the Company will not in the future be required to raise additional funds to maintain mining operations or conduct exploration activities on the Project.

## 2.9 Capital Structure

The capital structure of the Company following completion of the Offer is summarised below:

	Number of Shares
Shares currently on issue	8,200,001
Shares issued to Luso (a member of the ME Group) under the Share Sale Agreement	19,000,000
Shares to be issued under the Offer	40,000,000
<b>Total Shares post-Offer</b>	<b>67,200,001</b>

**Note:**

- 1 The rights attaching to the Shares are summarised in Section 8.2 of this Prospectus.

	Number of Options
Options currently on issue	Nil
Options to be issued to Lead Manager	3,000,000
<b>Total Options post-Offer</b>	<b>3,000,000</b>

**Note:**

- 1 Please see Section 8.3 for details on Options to be issued to the Lead Manager.

	Number of Performance Rights
Performance Rights – Directors and Management	6,250,000
Performance Rights – Luso (a member of the ME Group)	18,750,000
<b>Total Performance Rights post-Offer</b>	<b>25,000,000</b>

**Notes:**

- 1 Please see Section 8.4 for details on the terms of Performance Rights.
- 2 Please see Section 8.6 for details on the Performance Rights held by Directors.
- 3 Please see Section 7.2 for details on the Performance Rights held by Luso (a member of the ME Group). For further information in relation to Luso, MEIML and the ME Group, please refer to Section 2.10.

## 2.10 Substantial Shareholders

The ME Group will hold 20.6 million Shares, or approximately 30.6% of the Company's issued Shares on completion of the Offer on an undiluted basis.

On a fully diluted basis, (and assuming all Performance Rights and Options are exercised and no further Shares are issued) the ME Group will hold, subject to the Corporations Act, approximately 41.33% of the Shares on issue.

The ME Group is a Portuguese multinational organisation, one of the 30 largest European construction groups, with operations spanning 3 continents (Europe, Africa and South America) and 28 countries that focuses on construction and infrastructure management in areas that include energy and mining. The majority of the shareholder structure of the ME Group is made up of the Mota family through FM – Sociedade de Controlo SGPS holding approximately a 65% stake. Manuel Mota, a Non-Executive Director of the Company, is an Executive Board Member of the ME Group, which controls MEIML and Luso.

The Company will announce to the ASX details of its top-20 Shareholders (following completion of the Offer) prior to the Shares commencing trading on ASX.

## 2.11 Performance Rights and Independent Expert's Report

For the purposes of ASX Guidance Note 19, this Prospectus includes an Independent Expert's Report prepared by BDO Corporate Finance (WA) Pty Ltd (**BDO**) and which opines on the fairness and reasonableness of the Performance Rights.

BDO have opined that the Performance Rights are not fair but reasonable to non-participating security holders. See Annexure C for BDO's report.

To satisfy the conditions upon which ASX has determined that the Performance Rights are appropriate and equitable, the Company discloses:

- (a) The parties to whom the Performance Securities are to be issued, the number of Performance Securities to be issued to them or each of them and their relationship with the Company is as follows:

	Number of Performance Rights	Relationship with the Company
ME Group	18,750,000	Holding company of Luso (who is the vendor of the Project and who will receive the consideration under the Share Sale Agreement)
Cadell Buss	4,400,000	Managing Director
Philip Lucas	1,350,000	Chairman
Management	500,000	Employees and consultants of and to the Company
<b>Total Performance Rights post-Offer</b>	<b>25,000,000</b>	

- (b) In respect of those Performance Securities proposed to be issued to the Directors and Key Management Personnel of the Company:
- (i) the Performance Securities are being issued to remunerate or incentivise the recipient Directors, Messrs Lucas and Buss and management;
  - (ii) Messrs Lucas and Buss will, as Directors be responsible for, in the case of Mr Lucas as Chairman, overseeing and, in the case of Mr Buss as Managing Director, implementing the steps required to meet the respective performance milestones;
  - (iii) the details of the existing total remuneration package of Directors and employees being issued Performance Rights are set out in Section 8.7 of this Prospectus;
  - (iv) details of the securities held by Messrs Lucas and Buss and the employees is set out in Section 8.6 of this Prospectus;
  - (v) the Directors considered it necessary and appropriate to remunerate and incentivise Messrs Lucas and Buss and the employees to achieve the applicable performance milestones to ensure their interests were aligned with Shareholders, who may see a significant increase in Shareholder value if the milestones are satisfied; and
  - (vi) the Company determined the number of Performance Securities to be issued to Messrs Lucas and Buss and the employees having regard to their cash remuneration, the tasks performed prior the Company's listing (for which payment was not certain), to align their interests with Shareholders and to conserve cash. For those reasons the number of Performance Rights to be issued is considered appropriate and equitable.

## 2.12 Restricted Securities

Subject to the Company being admitted to the Official List, certain existing securities of the Company on issue prior to the Offer are likely to be classified by ASX as restricted securities (**Restricted Securities**). Restricted Securities must be held in escrow for up to 24 months from the date of Official Quotation and are not able to be sold, mortgaged, pledged, assigned or transferred for that period without the prior approval of the ASX.

Prior to admission to the Official List, the Company will enter into escrow arrangements with the recipients of any Restricted Securities in accordance with Chapter 9 of the ASX Listing Rules. The Company will announce to ASX full details (quantity and duration) of any Restricted Securities required to be held in escrow.

Based on information known to the Company at the Prospectus Date, it expects the Free Float on Admission will exceed 20% of the Shares on issue at that time.

As vendor for the Project, Luso will be subject to the following escrow:

- (a) 24 months escrow under the Listing Rules for all Shares and Performance Rights issued; and
- (b) a further 12 months voluntary escrow for 50% of the Shares and Performance Rights issued under the Share Sale Agreement.

The Performance Rights issued to Directors will be subject to 24 months escrow under the Listing Rules.

The Performance Rights issued to employees are not expected to be subject to any escrow (although under their terms may not be transferred. Only Shares issued upon vesting of such Performance Rights are transferrable).

### **2.13 Commissions payable**

The Company has agreed, pursuant to the Mandate, to pay certain fees to the Lead Manager with respect to valid applications being lodged and accepted by the Company. Payments will be subject to the receipt of a proper tax invoice from the licensed securities dealer or Australian financial services licensee.

See Section 7.5 for further details on the Mandate.

### **2.14 Applications**

Applications for Shares under the Offer must be made using the Application Form.

Applications for Shares must be for a minimum of 10,000 Shares and payment for the Shares must be made in full at the issue price of \$0.20 per Share.

Completed Application Forms must be completed so that it is received by no later than the Closing Date.

If you wish to participate, you are required to make a payment via BPAY or electronic funds transfer (EFT).

Applicants wishing to pay by BPAY should complete the online Application Form accompanying the electronic version of this Prospectus which is available via the following link <https://apply.automic.com.au/ChilwaMinerals> and follow the instructions on the online Application Form (which, for the purposes of a BPAY payment, includes the Biller Code and your unique Customer Reference Number (CRN)).

You should be aware that you will only be able to make a payment via BPAY if you are the holder of an account with an Australian financial institution which supports BPAY transactions.

When completing your BPAY payment, please make sure you use the specific Biller Code and your unique CRN or unique payment reference provided on the online Application Form. If you do not use the correct CRN your Application will not be recognised as valid. It is your responsibility to ensure that payments are received by 5.00pm (WST) on the Closing Date. Your bank, credit union or building society may impose a limit on the amount which you can transact on BPAY or through EFT, and policies with respect to processing BPAY transactions may vary between banks, credit unions or building societies. The Company accepts no responsibility for any failure to receive application monies or payments by BPAY before the Closing Date arising as a result of, among other things, processing of payments by financial institutions.

The Company reserves the right to close the Offer early.

### **2.15 Forecasts**

The Directors have considered the matters detailed in ASIC Regulatory Guide 170 and believe that they do not have a reasonable basis to forecast future earnings on the basis that the operations of the Company are inherently uncertain. Accordingly, any forecast or projection information would contain such a broad range of potential outcomes and possibilities that it is not possible to prepare a reliable best estimate forecast or projection.

The Directors consequently believe that, given these inherent uncertainties, it is not possible to include reliable forecasts in this Prospectus.

### **2.16 Applicants outside Australia**

This Prospectus does not, and is not intended to, constitute an offer in any place or jurisdiction, or to any person to whom, it would not be lawful to make such an offer or to issue this Prospectus. The

distribution of this Prospectus in jurisdictions outside Australia may be restricted by law and persons who come into possession of this Prospectus should seek advice on and observe any of these restrictions. Any failure to comply with such restrictions may constitute a violation of applicable securities laws.

No action has been taken to register or qualify the Shares or otherwise permit a public offering of the Shares the subject of this Prospectus in any jurisdiction outside Australia. Applicants who are resident in countries other than Australia are referred to the Important Information (Foreign Jurisdiction) section of this Prospectus and should consult their professional advisers as to whether any governmental or other consents are required or whether any other formalities need to be considered and followed.

If you are outside Australia it is your responsibility to obtain all necessary approvals for the allotment and issue of the Shares pursuant to this Prospectus. The return of a completed Application Form will be taken by the Company to constitute a representation and warranty by you that all relevant approvals have been obtained.

The following restrictions are applicable to this Offer:

(a) **Canada**

This Prospectus constitutes an offering of new Shares only in the Provinces of British Columbia, Ontario and Quebec (**Provinces**), only to persons to whom new Shares may be lawfully distributed in the Provinces, and only by persons permitted to sell such Shares. This document is not a prospectus, an advertisement or a public offering of shares in the Provinces. This document may only be distributed in the Provinces to persons who are “accredited investors” within the meaning of National Instrument 45-106- Prospectus Exemptions, of the Canadian Securities Administrators.

No securities commission or authority in the Provinces has reviewed or in any way passed upon this document, the merits of the new Shares or the offering of the new Shares and any representation to the contrary is an offence.

No prospectus has been, or will be, filed in the Provinces with respect to the offering of new Shares or the resale of such securities. Any person in the Provinces lawfully participating in the Offer will not receive the information, legal rights or protections that would be afforded had a prospectus been filed and receipted by the securities regulator in the applicable Province. Furthermore, any resale of the new Shares in the Provinces must be made in accordance with applicable Canadian securities laws.

While such resale restrictions generally do not apply to a first trade security of a foreign, non-Canadian reporting issue that is made through an exchange or market outside Canada, Canadian purchaser should seek legal advice prior to any resale of the new Shares.

The Company as well as its Directors and officers are located outside Canada and, as a result, it may not be possible for purchasers to effect service of process within Canada upon the Company or its Directors or officers. All or a substantial portion of the assets of the Company and any such persons may be located outside Canada and, as a result, it may not be possible to satisfy a judgement against the Company or such persons in Canada or to enforce a judgment obtained in Canadian courts against the Company or such persons outside Canada.

Any financial information contained in this Prospectus has been prepared in accordance with Australian Accounting Standards.

Securities legislation in certain Provinces may provide a purchaser with remedies for rescission or damages if an offering memorandum contains a misrepresentation, provided the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser’s Province. A purchase may refer to any applicable provision of the securities legislation of the purchaser’s Province for particulars of these rights or consult with a legal adviser.

Prospective purchasers of the new Shares should consult their own tax adviser with respect to any taxes payable in connection with the acquisition, holding or disposition of the new Shares as there are Canadian tax implications for investors in the Provinces.



(b) **United Kingdom**

Neither this Prospectus nor any other document relating to the Offer has been delivered for approval to the Financial Conduct Authority in the United Kingdom and no prospectus (within the meaning of section 85 of the Financial Services and Markets Act 2000, as amended (**FSMA**)) has been published or is intended to be published in respect of the new Shares.

The new Shares may not be offered or sold in the United Kingdom by means of this document or any other document, except in circumstances that do not require the publication of a prospectus under section 86(1) of the FSMA. This document is issued on a confidential basis in the United Kingdom to “qualified investors” (within the meaning of Article 2(e) of the Prospectus Regulation (2017/1129/EU), replacing section 86(7) of the FSMA). This Prospectus may not be distributed or reproduced, in whole or in part, nor may its contents be disclosed by recipients, to any other person in the United Kingdom.

Any invitation or inducement to engage in investment activity (within the meaning of section 21 of the FSMA) received in connection with the issue or sale of the new Share has only been communicated and will only be communication or caused to be communicated in the United Kingdom in circumstances in which section 21(1) of the FSMA does not apply to the Company.

In the United Kingdom, this Prospectus is being distributed only to, and is directed at, persons (i) who have professional experience in matters relating to investments falling within Article 19(5) (investment professionals) of the Financial Services and Markets Act 2000 (Financial Promotions) Order 2005 (**FPO**), (ii) who fall within categories of persons referred to in Article 49(2)(a) to (d) (high net worth companies, unincorporated associations, etc.) of the FPO or (iii) to whom it may otherwise be lawfully communicated (together “relevant persons”). The investment to which this Prospectus relates is available only to relevant persons. Any person who is not a relevant person should not act or rely on this Prospectus.

(c) **Singapore**

This Prospectus and any other materials relating to the Offer have not been, and will not be, lodged or registered in Singapore with the Monetary Authority of Singapore. Accordingly, this Prospectus and any other document or materials in connection with the Offer, or invitation for subscription or purchase, of the new Shares, may not be issued, circulated or distributed, nor may the Shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore except pursuant to and in accordance with exemptions in Subdivision (4) Division 1, Part 13 of the Securities and Futures Act 2001 of Singapore (**SFA**), or as otherwise pursuant to, and in accordance with the conditions of any other applicable provisions of the SFA.

This Prospectus has been given to you on the basis that you are (i) an existing holder of the Company’s Shares, (ii) an “institutional investor” (as defined in the SFA) or (iii) an “accredited investor” (as defined in the SFA). In the event that you are not an investor falling within any of the categories set out above, please return this document immediately. You may not forward or circulate this document to any other person in Singapore.

The Offer is not made with a view to the Shares being subsequently offered for sale to any other party in Singapore. There are on-sale restrictions in Singapore that may be applicable to investors who acquire Shares. As such, investors are advised to acquaint themselves with the SFA provisions relating to resale restrictions in Singapore and comply accordingly.

(d) **Hong Kong**

This Prospectus has not been, and will not be, registered as a prospectus under the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32 of the laws of Hong Kong), nor has it been authorised by the Securities and Futures Commission in Hong Kong pursuant to the Securities and Futures Ordinance (Cap. 571 of the laws of Hong Kong) (**SFO**). No action has been taken in Hong Kong to authorise or register this Prospectus or to permit the distribution of this Prospectus or any documents issued in connection with the Offer. Accordingly, no Shares have been and will be offered or sold in Hong Kong other than to “professional investors” (as defined in the SFO and any other rules made under that ordinance).

No advertisement, invitation or document relating to the Shares has been or will be issued, or has been or will be in the possession of any person for the purpose of issue, in Hong Kong or

elsewhere that is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to Shares that are or are intended to be disposed of only to persons outside of Hong Kong or only to professional investors. No person allotted Shares under the Offer may sell, or offer to sell, such securities in circumstances that amount to an offer to the public in Hong Kong within six (6) months following the date of issue of such securities.

The contents of this Prospectus have not been reviewed by any Hong Kong regulatory authority. You are advised to exercise caution in relation to the Offer. If you are in doubt about any contents of this Prospectus, you should obtain independent professional advice.

(e) **Portugal**

This Prospectus is not being distributed in the context of a public offer of shares (oferta pública de valores mobiliários) in Portugal, within the meaning of Article 109 of the Portuguese Securities Code (Código dos Valores Mobiliários). The Shares have not been offered or sold and will not be offered or sold, directly or indirectly, to the public in Portugal. This Prospectus and any other offering material relating to the Shares have not been, and will not be, submitted to the Portuguese Securities Market Commission (Comissao do Mercado de Valores Mobiliários) for approval in Portugal and, accordingly, may not be distributed or caused to be distributed, directly or indirectly, to the public in Portugal, other than under circumstances that are deemed not to qualify as a public offer under the Portuguese Securities Code. Such offers, sales and distributions of Shares in Portugal are limited to persons who are “qualified investors” (as defined in the Portuguese Securities Code). Only such investors may receive this document and they may not distribute it or the information contained in it to any other person.

(f) **United Arab Emirates**

This Prospectus does not constitute a public offer of securities in the United Arab Emirates (UAE) and the Shares may not be offered or sold, directly or indirectly, to the public in the UAE. Neither this Prospectus nor the Shares have been approved by the Securities and Commodities Authority (SCA) or any other authority in the UAE.

This Prospectus may be distributed in the UAE only to “professional investors” (as defined in the SCA Board of Directors’ Chairman Decision No. 13 RM of 2021, as amended) and may not be provided to any person other than the original recipient. No marketing of the Shares has been, or will be, made from within the UAE other than in compliance with the laws of the UAE and no subscription for any securities may be consummated within the UAE.

No offer or invitation to subscribe for Shares is valid, or permitted from any person, in the Abu Dhabi Global Market or the Dubai International Financial Centre.

## 2.17 Issue

Subject to the minimum subscription to the Offer of \$8,000,000 being reached, completion of the Offer and ASX granting conditional approval for the Company to be admitted to the Official List, the allotment of Shares offered by this Prospectus will take place as soon as practicable after the Closing Date.

Pending the allotment and issue of the Shares or payment of refunds pursuant to this Prospectus, all application monies will be held by the Company in trust for the applicants in a separate bank account as required by the Corporations Act. The Company, however, will be entitled to retain all interest that accrues on the bank account and each applicant waives the right to claim interest.

The Directors will determine the allottees of the Offer in their sole discretion. The Directors reserve the right to reject any application or to allocate any applicant fewer Shares than the number applied for. Where the number of Shares issued is less than the number applied for, or where no allotment is made, surplus application monies will be refunded without any interest to the applicant as soon as practicable after the Closing Date.

The Company will ensure, at the time of allotment of the Shares, that its Free Float at the time of listing will be not less than 20% of the Company’s issued capital.

## 2.18 ASX listing and quotation

Application for Official Quotation by ASX of all Shares (including the Shares offered pursuant to this Prospectus) will be made within 7 days after the date of issue of this Prospectus.

The Directors do not intend to allot any Shares unless and until ASX grants permission for the Shares to be listed for quotation unconditionally or on terms acceptable to the Directors.

If the Shares are not admitted to Official Quotation by ASX before the expiration of 3 months after the date of issue of this Prospectus, or such period as varied by ASIC, the Company will not issue any Shares and will repay all application monies for the Shares within the time prescribed under the Corporations Act, without interest.

The fact that ASX may grant Official Quotation to the Shares is not to be taken in any way as an indication of the merits of the Company or the Shares now offered for subscription.

## **2.19 Clearing House Electronic Sub-Register System (CHES) and Issuer Sponsorship**

The Company will apply to participate in CHES, for those investors who have, or wish to have, a sponsoring stockbroker. Investors who do not wish to participate through CHES will be issuer sponsored by the Company.

Electronic sub-registers mean that the Company will not be issuing certificates to investors. Instead, investors will be provided with statements (similar to a bank account statement) that set out the number of Shares allotted to them under this Prospectus. The notice will also advise holders of their Holder Identification Number or Security Holder Reference Number and explain, for future reference, the sale and purchase procedures under CHES and issuer sponsorship.

Electronic sub-registers also mean ownership of securities can be transferred without having to rely upon paper documentation. Further monthly statements will be provided to holders if there have been any changes in their security holding in the Company during the preceding month.

## **2.20 Taxation**

The acquisition and disposal of Shares will have tax consequences, which will differ depending on the individual financial affairs of each investor. All potential investors in the Company are urged to obtain independent financial advice about the consequences of acquiring Shares from a taxation viewpoint and generally.

To the maximum extent permitted by law, the Company, its officers and each of their respective advisors accept no liability and responsibility with respect to the taxation consequences of subscribing for Shares under this Prospectus.

## **2.21 Withdrawal**

The Directors may at any time decide to withdraw this Prospectus and the Offer in which case the Company will return all Application Monies (without interest) in accordance with the Corporations Act.

## **2.22 Privacy Disclosure**

Persons who apply for Shares pursuant to this Prospectus are asked to provide personal information to the Company, either directly or through the Share Registry. The Company and the Share Registry collect, hold and use that personal information to assess Applications for Shares, to provide facilities and services to Shareholders, and to carry out various administrative functions. Access to the information collected may be provided to the Company's agents and service providers and to ASX, ASIC and other regulatory bodies on the basis that they deal with such information in accordance with the relevant privacy laws. If you do not provide the information required on the Application Form, the Company may not be able to accept or process your Application.

An Applicant has a right to gain access to the information that the Company holds about that person subject to certain exemptions under law. A fee may be charged for access. Access requests must be made in writing to the Company's registered office.

## **2.23 Enquiries**

This Prospectus provides information for potential investors in the Company and should be read in its entirety. If, after reading this Prospectus, you have any questions about any aspect of an investment in the Company, please contact your stockbroker, accountant or independent financial adviser.

Questions relating to the Offer and the completion of an Application Form can be directed to the Share Registry at 1300 288 664 toll free or the Lead Manager on +61 3 8548 0301.

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### **3. COMPANY AND PROJECT OVERVIEW**

#### **3.1 Company overview**

Chilwa Minerals Limited is an Australian unlisted public company incorporated on 1 February 2022.

The Company was formed for the purpose of exploring and developing a portfolio of high-quality market sustaining HMS assets with a primary focus on the Lake Chilwa precinct in Malawi, Africa.

Since incorporation the Company has undertaken prelisting activities including raising seed capital and initial due diligence on projects located in Malawi.

The Company has entered into the Share Sale Agreement with Luso and MEIML to acquire 100% of the Project, which is located on the shores of Lake Chilwa in Malawi and is highly prospective for HMS mineralisation (including monazite and xenotime). A summary of the Share Sale Agreement is contained in Section 7.2 of this Prospectus.

#### **3.2 Malawi**

##### **(a) Location**

Malawi is a narrow landlocked country in south-eastern Africa bordering Tanzania, Zambia and Mozambique (see **Figure 1**). It has a population of approximately 19.6 million people and a land area of 118,480km<sup>2</sup>.

Malawi's economy is sustained by its agricultural industry that occupies the majority of the working population and accounts for the vast majority of export earnings. Malawi's key agricultural exports include tobacco, tea, sugar, cotton and corn.



Figure 1: Map of Africa with the location of the Republic of Malawi and the Project extracted

(b) **Economy**

Malawi is characterised as having a mixed legal system where sources of law include statutory law, English law, customary law and religious law.

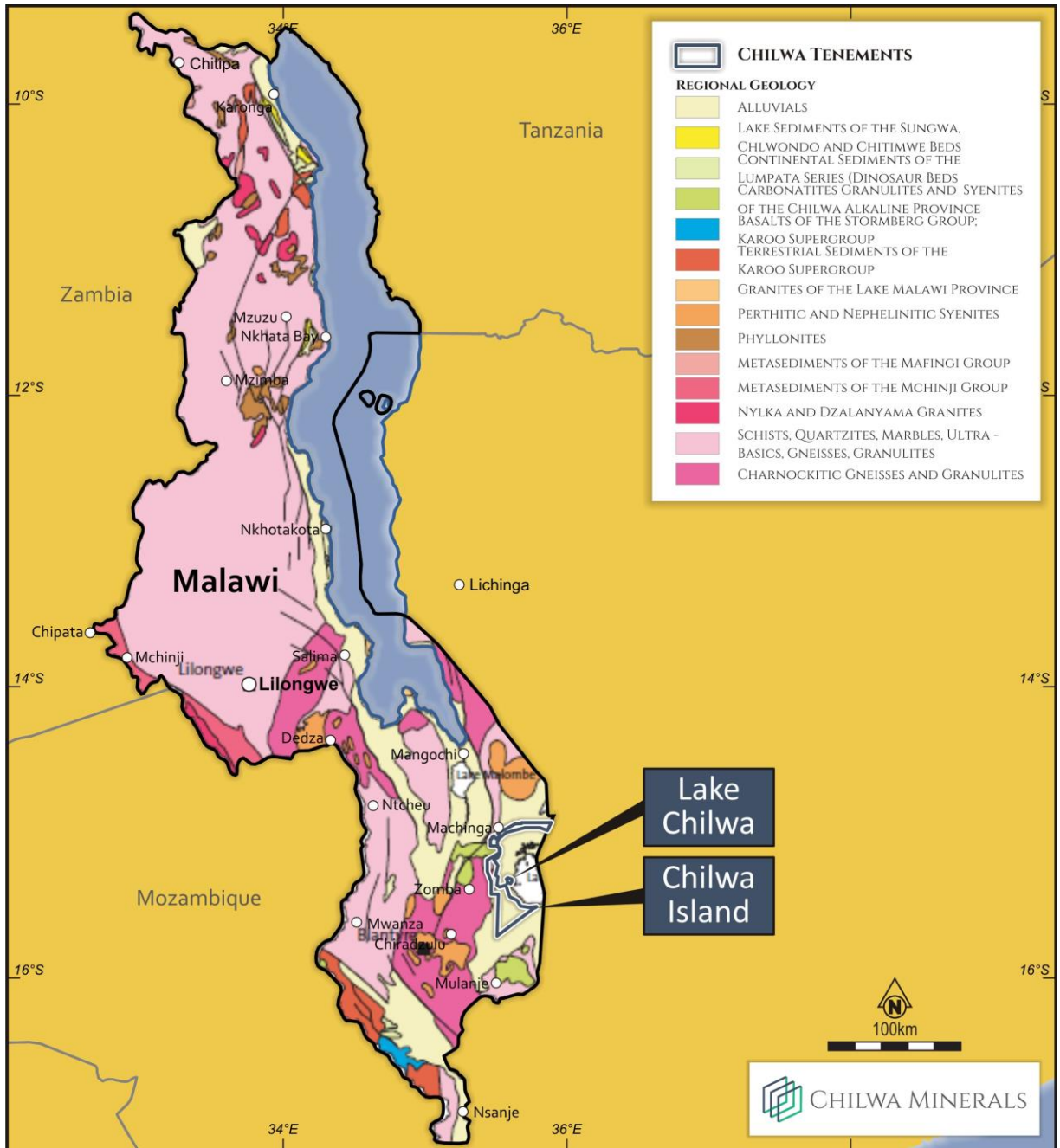
Following its independence from Great Britain in 1964, Malawi was a one-party republic from 1966 to 1994 when it became a multiparty democracy and currently has a unitary system of government.

The mining industry currently accounts for approximately one percent of Gross Domestic Product (**GDP**) in Malawi. The mining sector in Malawi has remained relatively underdeveloped despite evidence of mineral deposits, the most prominent of which are coal, bauxite, uranium, niobium and gemstones. It was not until the development of the Kayelekera Uranium Mine by Paladin Energy Limited (ASX: PDN) in 2009 that public interest in the mining potential of Malawi increased.

The Malawian government has sought to increase production in the mining sector through increased exploration and mining, improved legal and institutional frameworks, increased participation by small and medium scale miners and updated geological information systems. The Malawian government has a target to increase the mining sector's contribution to GDP from less than one percent in 2011 to up to ten percent by 2063.

(c) **Geology of Malawi**

The geology of Malawi is dominated by the East Africa Rift with Lake Chilwa, being the most southern major lake associated with the rift valley and is broadly grouped into four main lithological units; the Basement Complex, the Karoo Super group, Tertiary to Quaternary sedimentary deposits and the Chilwa Alkaline province (see **Figure 2**).



**Figure 2: Simplified geological map of Malawi**

Lake Chilwa was formed in a depression created at the base of the back slope of a listric fault that is part of the rift valley system. Lake Chilwa is bordered in the east by the Shire Highlands,

in the north by the Mongolwe, Chaone and Chikala mountains and the west by the Malosa and Zomba mountains.

Basement rocks in the Lake Chilwa area are largely comprised of the Chilwa Alkaline Province (**CAP**). These rocks are Cretaceous in age and include nepheline syenites, carbonatites and associated dyke swarms. Most of the elevated topography to the north-west and west of Lake Chilwa is comprised of igneous intrusive rocks of the CAP.

The oldest rocks in the Lake Chilwa area are Pre-Cambrian metamorphics, primarily paragneiss and orthogneisses. These outcrop in numerous locations regionally and likely underlie much of the area. Basement gneisses are primarily charnockitic and hornblende-biotite in composition. Quartzite and granulite are also present in the areas north of the lake.

The Chilwa alkaline province is a major geological feature comprising Jurassic and Cretaceous carbonatites, syenites, and nephelines which form most of the prominent high points in the region and compose a large volume of all rock locally. These include the Zomba Massif, the Mulanje Massif and the Chikala Hills. The intrusion of these major bodies is associated with the main movement along the Rift Valley.

Palaeo lacustrine and beach deposits cover the majority of the surface area around Lake Chilwa and have a wide range of ages and mineralogies. Colluvial and residual deposits also cover large areas. Lake Chilwa is an endorheic basin and therefore the deposits directly reflect the local catchment history. In addition, the depositional environments fluctuate as the ingress of water into the system varied in response to the changing climate over the course of millions of years.

Structurally, the area was isolated from the main regional drainages by the Cholo fault that forms the border between the Shire Highlands and the Lower Shire Valley. This was the major fault of Karoo age in the region. Movement along this fault resulted in northeastern uplift that resulted in the Alkaline magmatism of the CAP. These then acted as a barrier between the Chilwa depression and the rest of the Shire/Zambezi Valleys. Further movement and subsidence led to the Shire lowering further and increased erosion.

This combined with the uplift of the Mulanje and Zomba Massifs formed a new fault scarp around Zomba separating the Lake Chilwa area further. The reduction in catchment area (the Shire River drains out of Lake Malawi and has cut a new channel in the separate Shire Valley), reduction in flow and the reversal of some of the river's direction of flow due to local subsidence, meant that the basin filled with locally derived sediments. Presently, Lake Chilwa is completely separated and is the centre of a new drainage system that is currently regressing due to reduced flow.

The regional geology and structural evolution of the larger area surrounding the Lake Chilwa area has had a significant impact on the formation of the lake as well as the deposition and preservation of the HMS mineralisation that is present in the EL.

Several terraces and raised beach levels can be identified around the northern and western shores of Lake Chilwa, with specific terraces being associated with the mineralisation (refer **Figure 3**).

HMS deposits have been identified on the northern and western shores of Lake Chilwa (refer **Figure 6** below). The heavy minerals occur predominantly as dune deposits, with minor fluvial and strand concentrations, associated with the palaeo-shoreline of the lake.



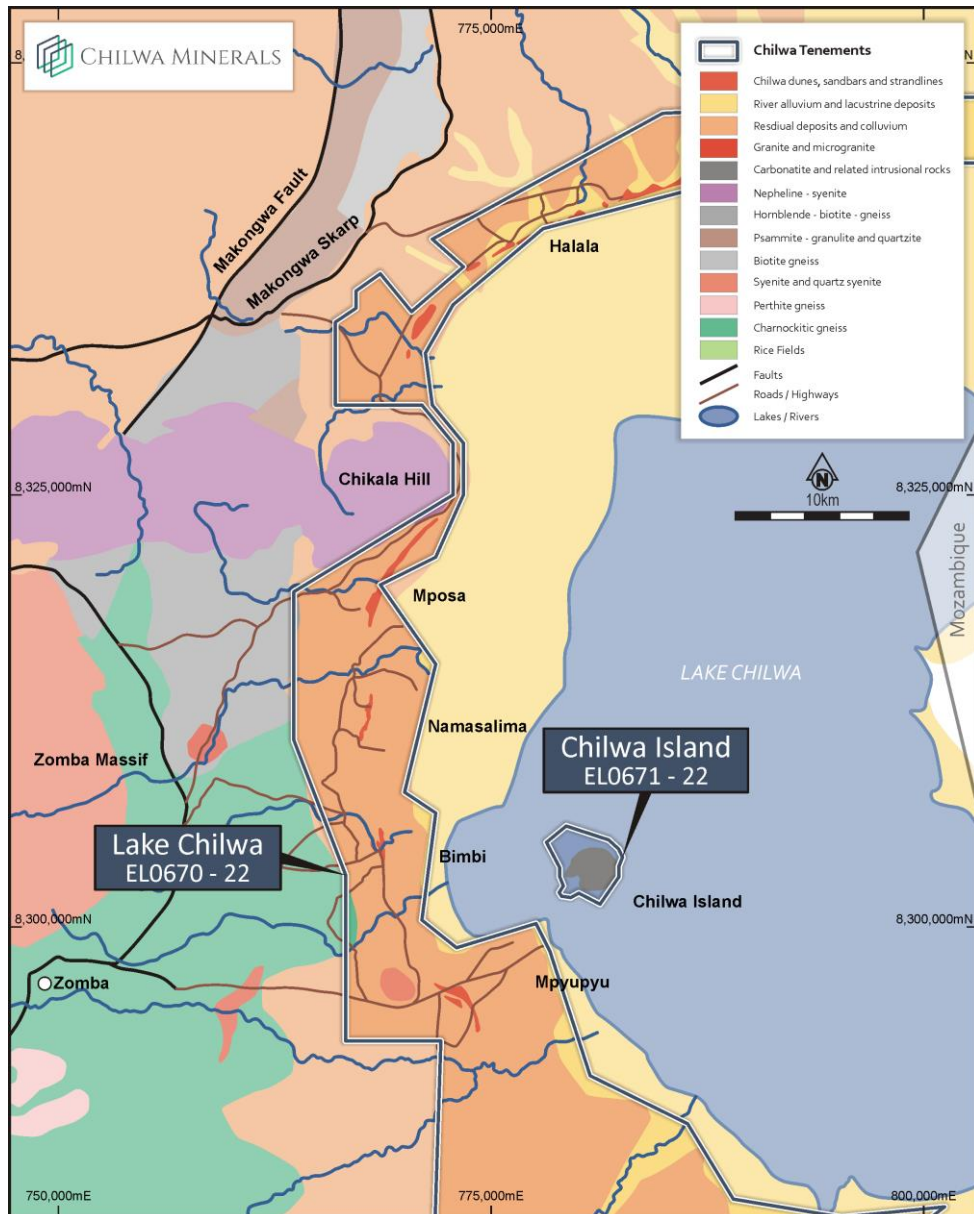


Figure 3: Regional geology of the Lake Chilwa/Zomba area

### 3.3 Project Overview

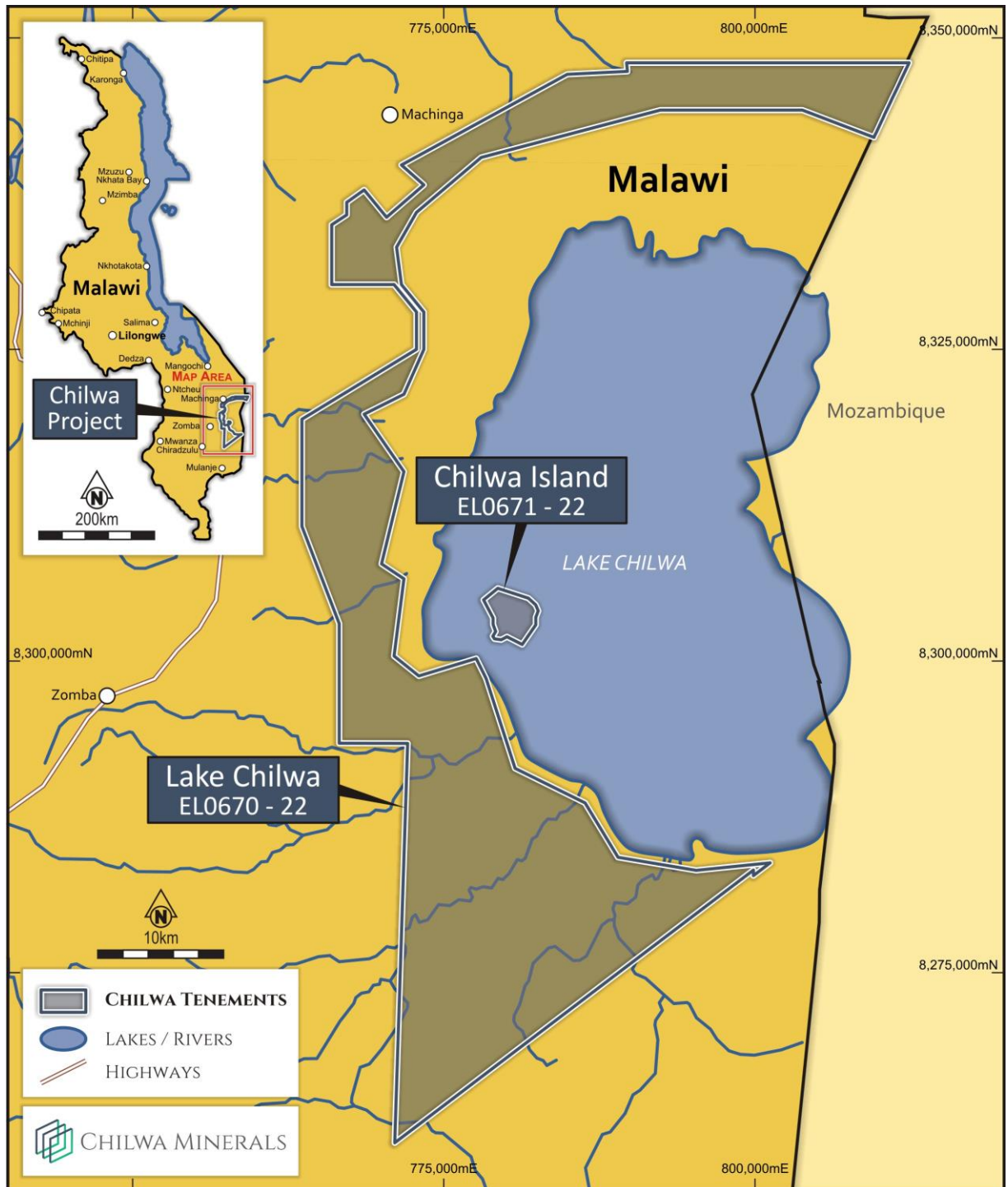
#### (a) Location

The Project is located around the southern, western and northern shores of Lake Chilwa in southern Malawi (see **Figure 4**). The lake is brackish, shallow and surrounded by swamps and marshes with seasonal floodplains. The Project covers a thin strip of land between the shore and the first break of slope in the north and northeast with the license expanding in the southwest to a maximum width of 8km on the mainland. Chilwa Island located 2km offshore is also included as part of the Project.

The Malawi border with Mozambique sits on the eastern side of Lake Chilwa. The lake is 60km long (north-south) and 40km wide (east-west). The old colonial capital of Malawi, Zomba is located 20km to the west and the capital Blantyre is located 80km southwest of the Project.

Access to the Project area in the dry season is straightforward, but access can be difficult in the wet season.





**Figure 4: Location of the Project**

**(b) Tenure**

The Project comprises two exploration licences that were granted on 26 and 27 September 2022 respectively, for a period of three years being:

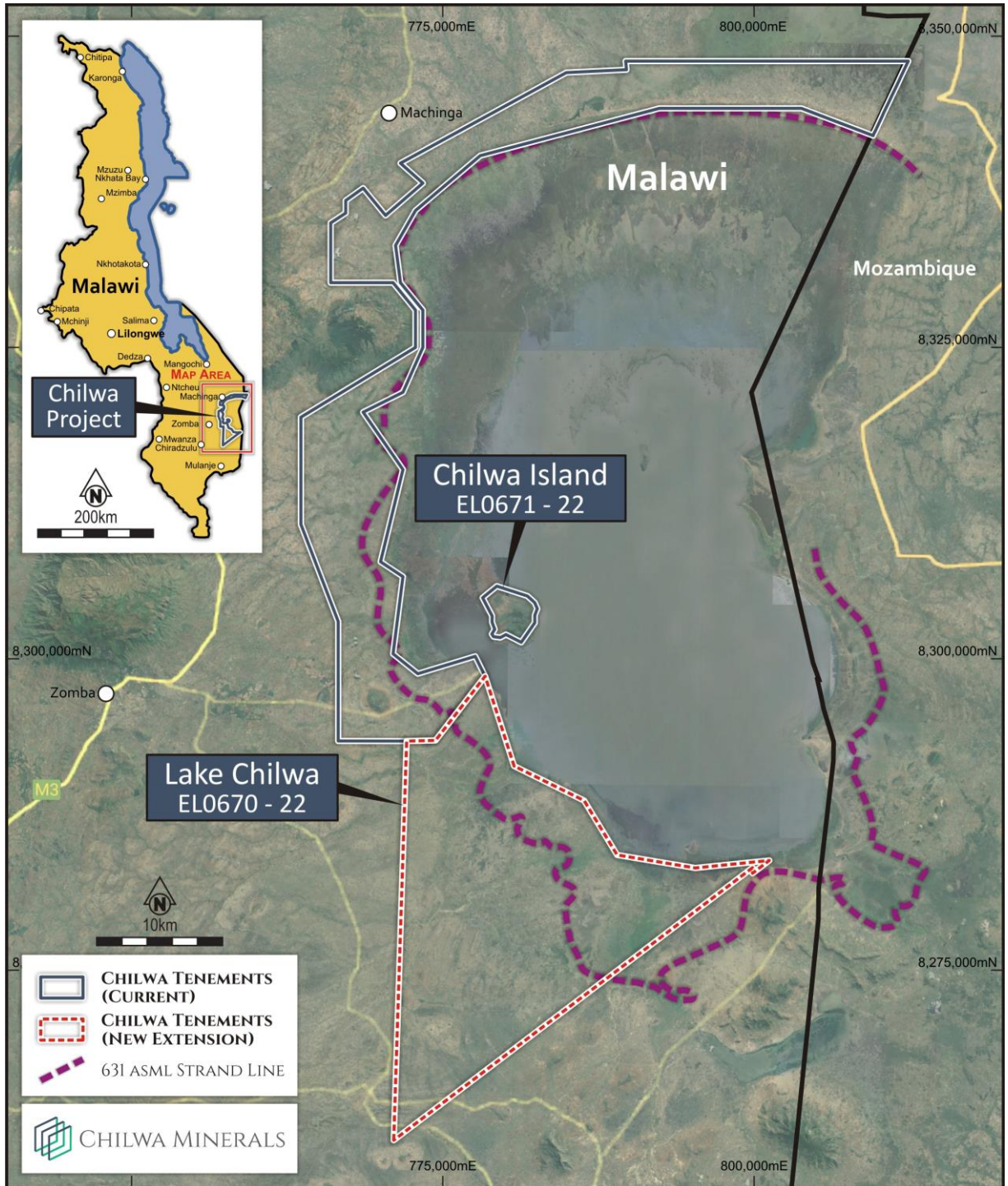
- (i) EL0670/22 over an area of 865.86km<sup>2</sup>. This licence skirts the northern, western and southern shores of Lake Chilwa.
- (ii) EL0671/22 over an area of 12.84km<sup>2</sup>, which represents Chilwa Island in its entirety. The island is located approximately 2km from the edge of Lake Chilwa.

These licences grant the Company exclusive rights to carry out exploration for HMS over the total tenement area of 878.7km<sup>2</sup> for the three-year period of the grant, with the option to extend in accordance with section 119 of the Mines and Minerals Act of Malawi.

The Company has not allocated any exploration expenditure in relation to EL0671/22 at this stage.

Initially the Project comprised one single licence covering an area of 407km<sup>2</sup>. In 2021 an application was made for the area to the south of the original license. This application covered the southwestern and southern shore of Lake Chilwa, the low-lying ground south of Mpyupyu and the area in between (see **Figure 5**). The application was successful and included a further grant of the Chilwa Island area.

The topography of the extension to EL0670/22 is very similar to that of the historic license in the north.



**Figure 5: Map of Lake Chilwa showing old licence area and new extension**

The exploration licences border the Songwe Hill rare earth element deposit of Mkango Resources Ltd in the southeast.

The 631 Strandline also in Figure 5 represents the ancient lake level from the timeline when the HMS containing dunes were deposited.

Further information on the Licences is set out in the Solicitor's Report, which is contained in Annexure D of this Prospectus.

(c) **Heavy Mineral Sands (HMS)**

The Project is prospective for HMS, which are ancient beach, river or dune sands that contain valuable mineral deposits.

HMS are placer deposits formed most usually in beach environments by concentration due to the Specific Gravity (**SG**) of the mineral grains. The principal value heavy minerals include ilmenite, leucoxene, rutile, zircon, monazite and xenotime.

The minerals that are mined from HMS deposits all have high density with an SG greater than 2.85 g/cm<sup>3</sup> (the SG of sand) allowing them to be concentrated by natural processes, such as storms and wave action. Most HMS deposits currently being exploited are found in unconsolidated, paleo-shorelines generally inland from the present shoreline.

The concentration of heavy minerals in a deposit is referred to as Total Heavy Minerals (**THM**). Concentration of heavy minerals occurs in varying proportions within each HMS deposit. Deposits containing high-rutile mineralisation are more valuable due to the higher titanium content. Deposits containing high-zircon mineralisation are also valuable, as zircon is more valuable than ilmenite.

The mineralisation is extracted using mining methods that minimise land disturbance.

A typical HMS assemblage can include rutile and ilmenite (titanium) typically used in paints and zircon, which is used in ceramics. HMS include monazite and xenotime, which are commonly used in an expanding range of high-tech consumer goods and low carbon technologies.

The primary export markets for HMS products have historically been China and Europe, with recent demand emerging from countries such as India, South Korea and the Middle East.

(d) **Chilwa Project Deposits**

The historical work programmes have confirmed the Project includes four known main deposits being Halala/Namania, Mposa, Bimbi and Mpyupyu all of which are located within the initial licence area before the extensions granted in 2022.

The July 2022 Mineral Resource Estimate has been classified and reported in accordance with the JORC Code (2012). The Mineral Resource comprises 10 sub-deposits within the four main deposits, totalling Inferred Mineral Resources of 2.4Mt of THM at a 1.0% THM cut-off. (see **Table 1** below).

- (i) Halala/Namanja is to the north of Lake Chilwa, which is incised by several rivers. It has an east-west strike of 20km. The dune is split into four sub areas (from east to west); Halala, Beacon, Namanja and Nkotomo, which are typically 200m to 300m wide.
- (ii) Mposa is located on the western shore of Lake Chilwa. Mposa forms a prominent dune ridge, similar to Halala and is split into two areas; Mposa Main and Mposa North. Mposa is approximately 6km long and 300m wide.
- (iii) Bimbi is located on the south-west shore of Lake Chilwa and has similar geology and grade characteristics to Mposa. This deposit is split by two areas; Bimbi Main and Bimbi North East.
- (iv) Mpyupyu is situated to the south of Bimbi and consists of three separate areas. The western area has similar geology and grade characteristics to the Mposa and Bimbi deposits and is thought to be dunal in nature. This deposit is split into Mpyupyu Dune and Mpyupyu Flat, which comprises Mpyupyu East, Central and West in **Figure 6** below.



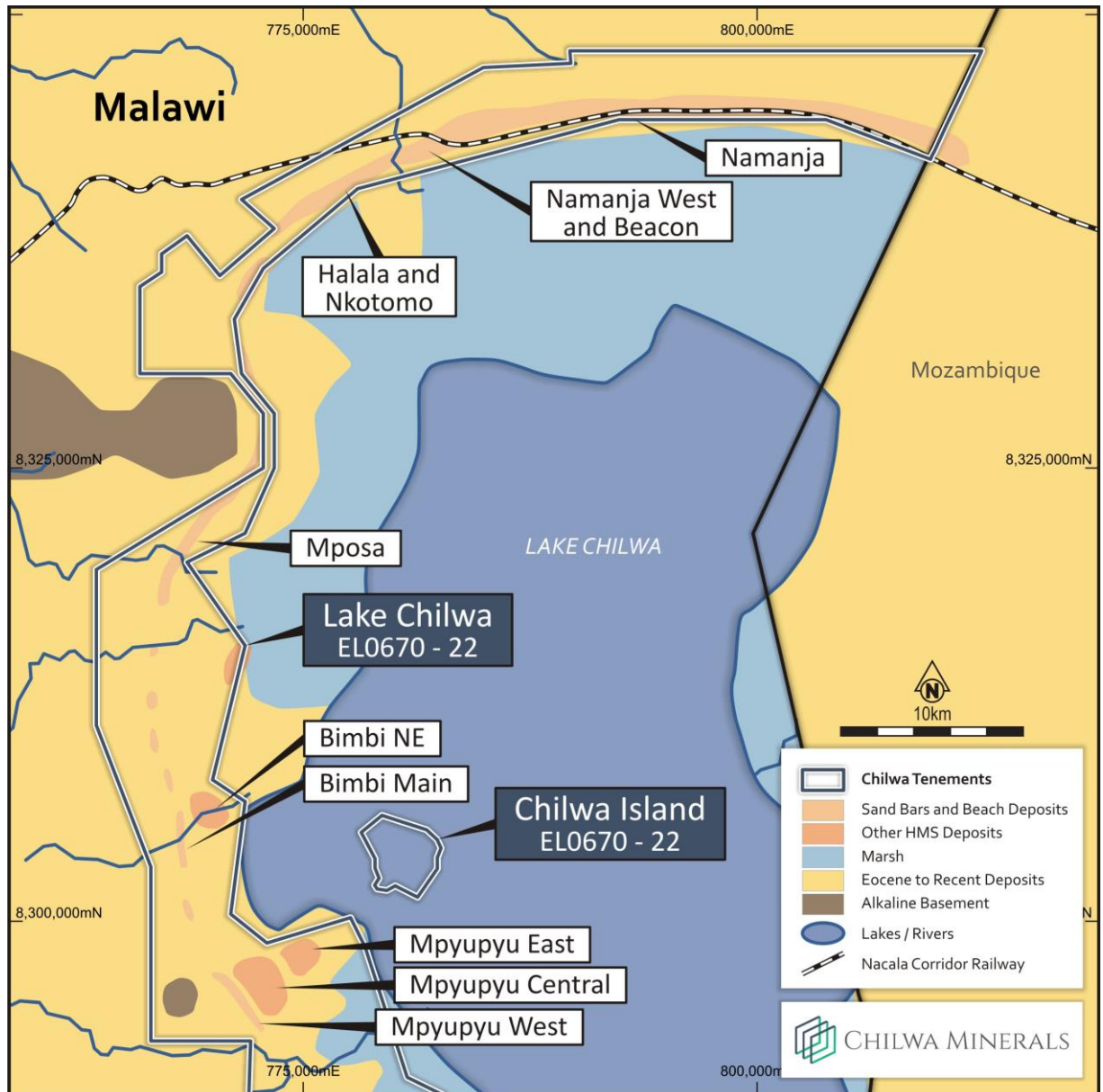


Figure 6: Project deposits

(e) **JORC 2012 Inferred Mineral Resource Estimate**

A Mineral Resource Estimate (MRE) for the Project has been classified and reported in accordance with the JORC Code (2012). The Mineral Resource Estimate has been classified as Inferred, and at a 1.0% THM cut-off contains 2.4Mt of contained THM. The MRE is allocated across the Project deposits in **Table 1** below.

Deposit	Volume (million m <sup>3</sup> )	Tonnes (million t)	Dry Density (t/m <sup>3</sup> )	Gangue (%)	Ilmenite (%)	Zircon (%)	THM (%)	Slimes (%)
Bimbi Main	1.5	2.6	1.7	0.7	4.3	0.3	5.3	15.3
Bimbi Northeast	3.6	6.1	1.7	0.3	2.2	0.1	2.7	15.9
Mposa (Main)	11.7	19.4	1.7	0.7	3.2	0.4	4.3	11.7
Mposa (North)	0.6	1.0	1.7	0.3	1.4	0.2	1.9	8.3
Mpyupyu (dune)	2.0	3.5	1.7	1.2	5.7	0.2	7.1	15.3
Mpyupyu (flat)	9.5	16.4	1.7	0.5	2.9	0.2	3.6	15.4
Nkotomo	0.1	0.2	1.5	1.1	3.0	0.2	4.2	28.3
Halala	6.0	8.9	1.5	0.9	2.6	0.2	3.7	9.8

Beacon	0.4	0.6	1.5	0.6	1.8	0.1	2.5	17.7
Namanja West	2.0	2.9	1.5	0.8	2.3	0.2	3.3	14.7
<b>Total</b>	<b>37.5</b>	<b>61.6</b>	<b>1.6</b>	<b>0.7</b>	<b>3.0</b>	<b>0.3</b>	<b>3.9</b>	<b>13.3</b>

**Table 1: Inferred Mineral Resource Estimate at 1.0% THM at the Project as at 31 July 2022**

**Notes:**

1. The MRE was prepared by the Independent Geologist.
2. In situ, dry metric tonnes have been reported using varying densities and slime cut-off per deposit.
3. Material below 30% slimes for Halala, 20% slimes for Bimbi, Northeast Bimbi and Mpyupyu (dune and flat) and 25% slimes for Mposa (Main and North). All other deposits are as stated using 30% slimes as cut-off.
4. Tonnages and grades have been rounded to reflect the relative uncertainty of the estimates and resultant confidence levels used to classify the estimates. As such, columns may not total.
5. The MRE has been constrained by ultimate pit shells to demonstrate reasonable prospects for eventual economic extraction.
6. Estimates are classified as Inferred according to JORC.

The MRE was estimated by the Independent Geologist and is contained in the Independent Geologist's Report (**IGR**), which is included as Annexure A to this Prospectus. The principal sources of information used to compile the IGR are technical reports and data variously compiled by the Independent Geologist and/or the ME Group.

Validation of all the data was undertaken by the Independent Geologist who did not identify any critical errors and, as a result, believes that the available database is of industry standard and is suitable for use for the MRE.

Work completed by the ME Group (and the data for the estimation of the MRE) included approximately 10,000m of drilling, metallurgical and process test work studies, completed in 2014 and 2015 to verify the presence and heavy mineral content of the HMS deposits identified by earlier exploration work. This included auger drilling on existing and new targets as well as preliminary process optimisation and metallurgical studies.

Regional auger drilling programmes have indicated the potential for additional HMS deposits on the EL.

A total of 9,922m (1,492 holes) of drilling was completed on the Mpyupyu, Bimbi, Mposa, and Halala deposits. A summary of the drilling undertaken by the ME Group and included in the MRE is provided in **Table 2** below.

Deposit	Air Core		Diamond	
	Holes	Metres	Holes	Metres
Mpyupyu	406	2,790	69	495
Bimbi	294	1,671	67	398
Mposa	340	2,118	59	370
Halala	327	1,936	24	142
<b>Total</b>	<b>1,367</b>	<b>8,515</b>	<b>219</b>	<b>1,407</b>

**Table 2: Lake Chilwa MRE drilling summary**

**Note:**

1. The diamond drilling was excluded from the MRE due to poor recoveries.

Due to a failure in the primary laboratory, a significant proportion of the samples taken from the above drilling, were not correctly assayed resulting in overstated slimes and slightly understated THM values. This resulted in the MRE being classified at the Inferred level of confidence.

(f) **Proposed Exploration Program**

The Company proposes to undertake an initial exploration program designed to increase the confidence level of the deposits and search for further mineralisation, which will also determine potential timing of further activities.

To manage the exploration program, and subject to the results of each stage of work, the Company expects to supplement its existing personnel with additional technical expertise as and when needed with a mixture of both permanent and temporary positions.

Previous exploration on the Project resulted in the estimation of Inferred Mineral Resources classified and reported in accordance with the JORC Code (2012). The proposed program will use sonic core drilling and focus on increasing the size of the currently identified MRE and improving the confidence levels associated with the MRE to the Indicated and Measured levels of confidence. Exploration drilling will also target the licence extension area to the southwest and south, where additional HMS mineralisation may exist.

Both step-out and infill drilling will be undertaken on the currently identified deposits. A number of outcomes are to be accomplished from this approach.

First, due to the recovery issues from the last campaign, testing the mineralisation at a greater depth is a priority – previous holes rarely passed 10m. The proposed drilling program should be able to determine mineralisation and clearly define the footwall to the HMS mineralisation across the licence.

Secondly, increasing the confidence levels of the MRE to the Indicated and Measured levels of confidence is crucial.

Finally, previous drilling was only conducted directly on the dunes (especially in the north). Stepping out drilling will be undertaken to test across the full width of the EL.

Drilling is proposed on a 50m x 50m grid at the four existing prospects with focused areas of 25m x 25m where the grade is known to be higher. All deposits will be bulk sampled for test work purposes.

The proposed drilling program is to take advantage of existing access and follow a natural progression by starting in the north at the Halala/Namanji deposits, working south to Mposa, Bimbi and into Mpyupyu.

Following this, exploration drilling can commence in the new extension area which will allow time for the radiometric survey to be conducted and the data analysed and interpreted. The results of this survey will contribute significantly to the identification of potential areas of interest and the design of an exploration drill plan.

### **Halala/Namanji**

Halala is characterised by a break in slope into a prominent dune running west-south-west and east-north-east. At present 3,000m of resource drilling is planned at Halala, with drill and bulk samples being sent to ALS Geochemistry (Perth) for analysis. This deposit is expected to incorporate approximately 15% of the exploration budget in years 1 and 2. The drilling program will twin historic holes with the dual intention of validating previous work and also drilling deeper to define the footwall along with infill drilling to improve the level of confidence associated with the geological model and the MRE. The basic drilling grid used will be 50m x 50m, with known higher-grade areas drilled at a much closer spacing (e.g. 25m x 25m or 12.5m x 12.5m). Road infrastructure in the area is generally good, however some of the infrastructure development budget will need to be spent in order to improve access in some areas or build access roads in other parts.

### **Mposa**

A 6,000m drilling campaign is planned for the Mposa area (see **Figure 7**). Mposa is currently the largest area of estimated Mineral Resource in the project. The planned twinning and infill resource drilling program will account for 30% of the proposed budget spend.

A 50m x 50m grid drill plan will be used with some areas drilled at closer spacing in order to increase levels of confidence. Twinned holes will be spread along the main spine of the deposit and the infill and expansion holes will be focused on the uphill (western) edge of the currently estimated resource.

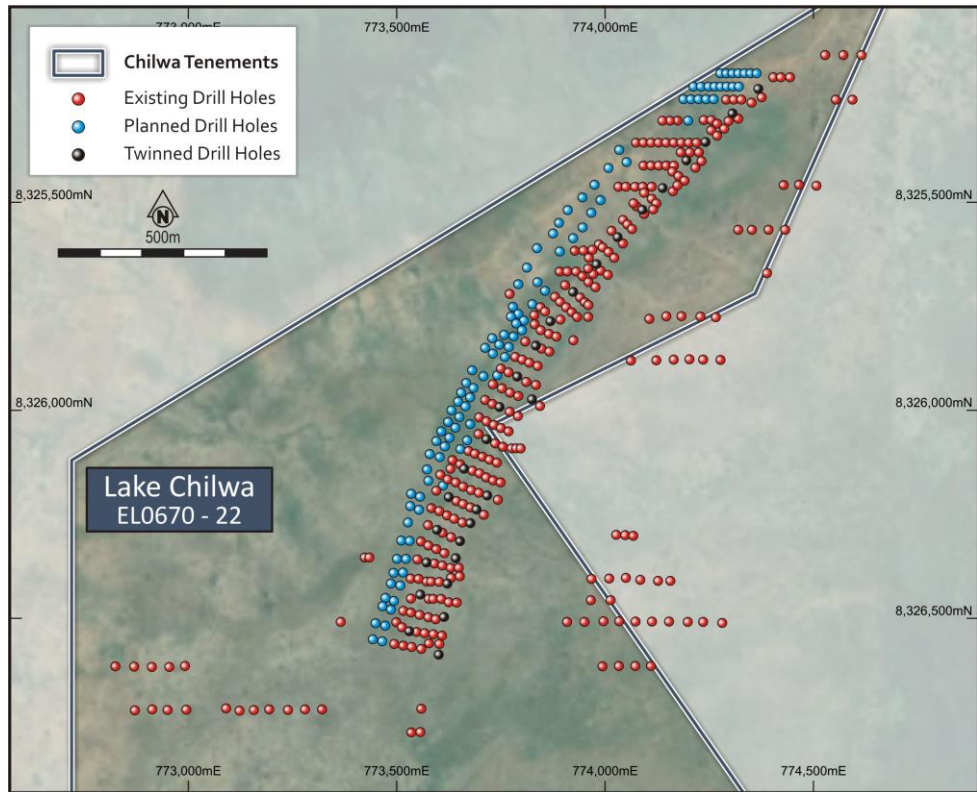


Figure 7: Planned drill works (Mposa)

**Bimbi**

At Bimbi approximately 2,500 m of drilling is currently planned (see **Figure 8**). The drilling plans to use a 50 m x 50 m grid with closer spaced holes within the currently defined resource.

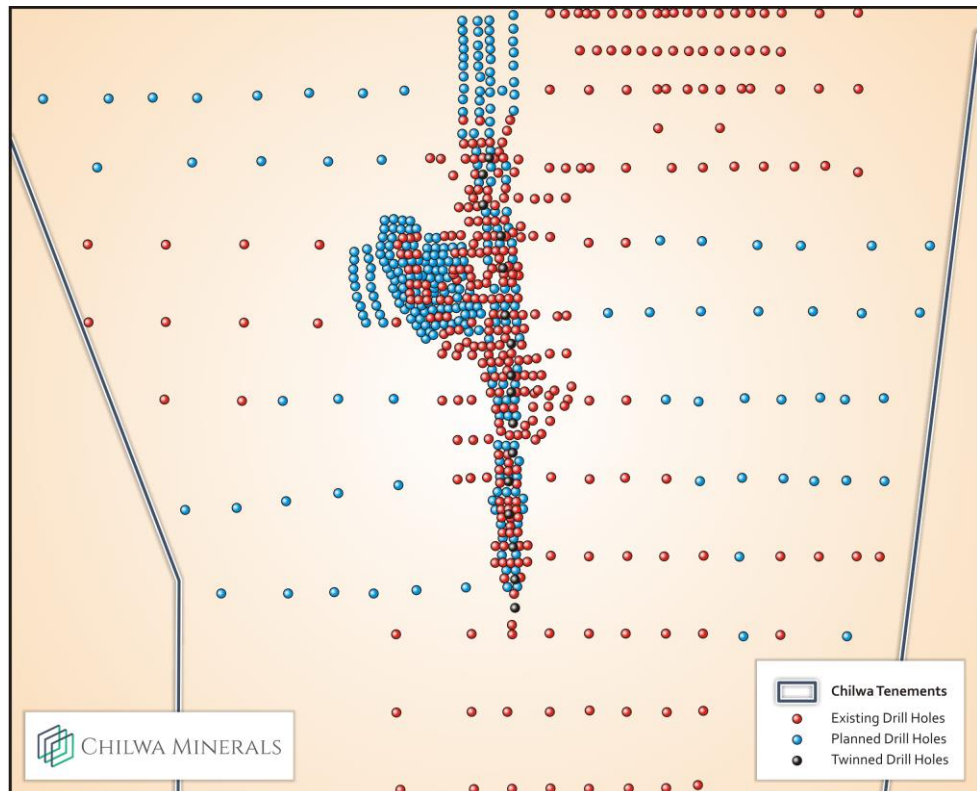


Figure 8: Planned drill works (Bimbi)



## Mpyupyu

The drilling at Mpyupyu will focus on using twinning and infill drilling to improve the definition of the deposit in what is the largest of the target areas and an area that was previously intensively drilled. 2,500m of sonic core drilling will mainly target the crescent dune in the south-west of the area. The drilling and samples to be assayed is expected to consume 12.5% of the proposed budget. The drill plan will focus on infilling the existing drilling pattern so that a basic 50m x 50m grid will be draped over the deposit with areas of closer spaced drilling within the main resource.

### Extended Licence Area

The first phase of the exploration program at the extended licence area (shown above in **Figure 5**) will utilise a LiDAR survey and remote sensing imagery to identify topographic features that could be strandlines or palaeochannels. An airborne radiometric survey will also be conducted as the HMS deposits in the EL are known to be visible when using thorium and potassium filters.

A planned second phase will comprise a 6,000m exploration drilling campaign, using sonic drilling techniques. A wider 200m x 200m reconnaissance grid will be used initially and adjusted accordingly as areas of higher potential are identified.

## 3.4 Proposed exploration expenditure

The use of funds for the Project is targeting an initial 2-year exploration expenditure of \$4,500,000 within a \$8,000,000 capital raise, and with the primary yearly activities outlined in the table below:

Activity	Year 1	Year 2	Total
Assays & Metallurgical	717,000	677,000	1,394,000
Bulk Sampling	50,000	50,000	100,000
Drilling	804,000	804,000	1,608,000
ESG	333,000	60,000	393,000
Geological Staff and field technicians	274,000	285,412	559,412
Infrastructure / Road Cutting	110,000	50,000	160,000
Radio Metrics	95,000	-	95,000
Resource Model	190,588	-	190,588
<b>Total</b>	<b>\$2,573,588</b>	<b>\$1,926,412</b>	<b>\$4,500,000</b>

**Table 3: Proposed Exploration Budget**

The Company has entered into the Drilling Contract with ME Africa for drilling and related services. Please see Section 7.4 for further information.

## 3.5 Group structure

Prior to completion of the Offer, the Company will acquire 100% of the issued share capital in CMA, an entity incorporated in Malawi, which will hold the Tenements that comprise the Project. A summary of the Share Sale Agreement is contained in Section 7.2 of this Prospectus.

There are currently no other companies or entities that the Company has an interest in.

## 3.6 Dividend policy

It is anticipated that significant expenditure will be incurred in the evaluation and development of the Company's proposed exploration budget described in Section 3.4 above. These activities are expected

to dominate at least the 2-year period following the date of this Prospectus. Accordingly, the Company does not expect to declare any dividends during that period.

Any future determination as to the payment of dividends by the Company will be at the discretion of the Directors and will depend on the availability of distributable earnings and operating results and financial condition of the Company, future capital requirements and general business and other factors considered relevant by the Directors. No assurance in relation to the payment of dividends can be given by the Company.

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## **4. DIRECTORS AND OFFICERS**

The Company will be managed by the Board. The Board presently comprises four Directors. Biographies of the Directors and the Company Secretary are outlined below:

Please see Sections 8.6 and 8.7 for details of the Directors' interests and remuneration.

### **4.1 Philip Andrew Lucas – Non-Executive Chairman**

Mr Lucas has in-depth knowledge of the Australian corporate and resources sectors and provides commercial and strategic advice to both publicly listed and private clients in his capacity as Partner & Chairman of boutique legal and advisory firm Allion Partners.

Providing legal advice predominantly in mergers and acquisitions, equity capital markets and corporate law, Phil has extensive experience with cross border M&A transactions including those involving Australian, U.S and Canadian companies.

### **4.2 Cadell Scott Buss – Managing Director**

Mr Buss is a multi-industry senior executive with over 20 years' experience locally and internationally in marketing, project development and capital markets.

Cadell was the CEO of Western Australia's oldest stockbroking firm DJ Carmichael for four and a half years and has consulted to a number of ASX listed companies with African based assets.

Cadell was previously Project and Finance Director with Luso, an angel investor to African based exploration companies.

Cadell is also a Non-Executive Director of Atlas Pearls Ltd (ASX: ATP).

Cadell has a Masters degree in Project Management, an MBA from Murdoch University and is a graduate of the Australian Institute of Company Directors.

### **4.3 Manuel Antonio Da Fonseca Vasconcelos Da Mota – Non-Executive Director**

Mr. Mota started his career within the ME Group 13 years ago in Angola as an engineer and progressed to become a member of the Board of Mota-Engil Angola.

Manuel was appointed CEO for Mota-Engil Central Europe in May 2013 to January 2016. He was then appointed to the Executive Board of the ME Group, as CEO of Mota-Engil Africa in February 2016 and then cumulatively as CEO of Mota-Engil Europe since February 2019. He held these roles until June 2021. Since June 2021 he continues to be an Executive Board Member of the ME Group, and was appointed as the Vice-CEO of the ME Group in February 2023.

Manuel has a Masters of Civil Engineering from University College London.

Manuel is the Chairman of Luso and an Executive Board Member of the ME Group, which controls MEIML.

For further information in relation to Luso, MEIML and the ME Group, please refer to Section 2.10.

### **4.4 Alexander Iain Shaw – Non-Executive Director**

Dr. Shaw is a highly accomplished geoscientist with 20 years of global experience in exploration and production.

Alexander has spent most of his career exploring for and developing diamond, base and precious metal deposits within Africa, Northern Europe, Central and South America.

Alexander has a DPhil from the University of Oxford where his research focused on the geochemistry and sedimentology of the Mega Kalahari Basin. He previously worked on exploration target generation, resource and project assessment, project development and mine operation for African Minerals, First Quantum Minerals, Wood Mackenzie and Canyon Resources.

Alexander is a Fellow of the Geological Society of London and a member of the following professional bodies: Australian Institute of Geoscientists, Southern Africa Institute of Mining and Metallurgy, American Institute of Professional Geologists and the Society of Economic Geologists.

Alexander is the Managing Director and CEO of Luso, a member of the ME Group, which controls MEIML.

For further information in relation to Luso, MEIML and the ME Group, please refer to Section 2.10.

#### 4.5 John Lewis, Chief Financial Officer and Company Secretary

Mr Lewis has a Bachelor of Business degree and is a Chartered Accountant with more than 30 years post qualification experience.

John gained extensive corporate governance and company reorganisation experience working in the accounting profession for companies including Deloitte and Pitcher Partners mainly in the corporate reconstruction division.

Since 2007, John has worked predominantly in the resource development and mining sector in Australia and overseas as a Director, CFO and Company Secretary including acting Director and CFO for Resource Base Limited (ASX: RBX) and as Company Secretary for Altura Mining Limited (now Morella Corporation Limited (ASX: 1MC)) in their recent listing/re-quotations on the Official List of the ASX.

#### 4.6 Corporate Governance

##### (a) Environmental, Social and Governance Policy

As part of its corporate governance, the Board has adopted an Environmental, Social and Governance Policy (**ESG Policy**). The purpose of the ESG Policy is to ensure that the Company is able to recognise, administer and maintain its legal and other obligations associated with ESG to all stakeholders who are directly or indirectly impacted by the activities of the Company. The ESG Policy is available on the Company's website: [www.chilwaminerals.com.au](http://www.chilwaminerals.com.au).

##### (b) Corporate Governance Principles and Recommendations

The Company has adopted corporate governance policies in keeping with an organisation of its size and type. These policies have been compared to the ASX Corporate Governance Council's Corporate Governance Principles and Recommendations (4<sup>th</sup> Edition). Where the Company has departed from a strict application of a recommendation in the recommendations, this is set out in the table below. The various corporate governance policies adopted by the Company are available in a dedicated corporate governance information section of the Company's website at [www.chilwaminerals.com.au](http://www.chilwaminerals.com.au).

Recommendations	Explanation for Departure
<p><b><u>Recommendation 1.5</u></b></p> <p>A listed entity should:</p> <p>(a) have a diversity policy which includes requirements for the board or a relevant committee of the board to set measurable objectives for achieving gender diversity and to assess annually both the objectives and the entity's progress in achieving them;</p> <p>(b) disclose that policy or a summary of it; and</p> <p>(c) disclose as at the end of each reporting period the measurable objectives for achieving gender diversity set by the board in accordance with the entity's diversity policy and its progress towards achieving them, and either:</p> <p>(i) the respective proportions of men and women on the board, in senior executive positions and across the whole organisation (including how the</p>	<p>The Company has adopted a Diversity Policy, which is available on the Company's website. However, the Board does not currently intend to set measurable gender diversity objectives because:</p> <p>(a) the Board does not anticipate there will be a need to appoint any new Directors or senior executives given the Company's size and stage of development and the Board's view that the existing Directors and senior executives have sufficient skills and experience;</p> <p>(b) if the Company is required to appoint any new Directors or senior executives, the Board will consider whether requiring specified objectives to be met will unduly limit the Company from employing the best available staff with skills required to carry out the vacant positions; and</p> <p>(c) the respective proportions of men and women on the Board, in senior executive positions and across the</p>

Recommendations	Explanation for Departure
<p>entity has defined “senior executive” for these positions); or</p> <p>(ii) if the entity is a “relevant employer” under the Workplace Gender Equality Act, the entity’s most recent “Gender Equality Indicators”, as defined in and published under that Act.</p>	<p>workforce (including how the Company defines “senior executive” for these purpose) for each financial year will be disclosed in the Company’s Annual Report.</p>
<p><b><u>Recommendation 2.1</u></b></p> <p>The board of a listed entity should:</p> <p>(a) have a nomination committee which:</p> <p>(i) has at least three members, a majority of whom are independent directors; and</p> <p>(ii) is chaired by an independent director,</p> <p>and disclose:</p> <p>(iii) the charter of the committee;</p> <p>(iv) the members of the committee; and</p> <p>(v) as at the end of each reporting period, the number of times the committee met throughout the period and the individual attendances of the members at those meetings; or</p> <p>(b) if it does not have a nomination committee, disclose that fact and the processes it employs to address board succession issues and to ensure that the board has the appropriate balance of skills, knowledge, experience, independence and diversity to enable it to discharge its duties and responsibilities effectively.</p>	<p>Commensurate with the Board’s small size and the scale and stage of the Company’s operations. The Board believes these functions are best performed by the full Board itself. The Board will continue to monitor its performance and develop a succession plan as the company evolves.</p>
<p><b><u>Recommendation 2.6</u></b></p> <p>A listed entity should have a program for inducting new directors and provide appropriate professional development opportunities for directors to develop and maintain the skills and knowledge needed to perform their role as directors effectively.</p>	<p>Commensurate with the Board’s small size and the scale of the Company’s operations, the induction process for new directors is currently informal. Directors are supported in undertaking their own continuing professional development.</p>
<p><b><u>Recommendation 4.1</u></b></p> <p>The Board of a listed entity should have an audit committee which consists of at least 3 members all of whom are non-executive</p>	<p>The Company does not have a separate Audit Committee because the Board fulfils these functions. The Company’s Audit Committee Charter provides for the creation of an Audit Committee, when the Board</p>

Recommendations	Explanation for Departure
<p>directors and a majority of whom are independent directors and the committee should be chaired by an independent director who is not the chair of the board.</p> <p>If it does not have an audit committee, the Board should disclose that fact and the processes it employs that independently verify and safeguard the integrity of its corporate reporting, including the processes for the appointment and removal of the external auditor and the rotation of the audit engagement partner.</p>	<p>considers one is required or otherwise in the best interests of the Company. In the absence of such a committee the Board carries out the duties that would ordinarily be carried out by the Audit Committee under its charter, including monitoring the form and content of the Company's financial statements and reviewing the Company's internal financial controls and risk management systems</p>
<p><b><u>Recommendation 7.1</u></b></p> <p>The Board should establish a risk management committee made up of at least 3 members, a majority of whom are independent directors, and chaired by an independent director.</p> <p>If it does not have a risk committee, the Board should disclose that fact and the processes it employs for overseeing the entity's risk management framework.</p>	<p>The Company does not currently have a risk management committee. The Board has considered this matter and decided that the non-compliance does not affect the operation of the Company. This recommendation will be satisfied at the appropriate time in the Company's future.</p> <p>In the absence of a risk management committee, the Board carries out the duties that would ordinarily be carried out by the Audit and Risk Committee under the Audit and Risk Committee Charter, including the following processes to oversee the entity's risk management framework:</p> <ul style="list-style-type: none"> <li>(a) regular reporting to the Board on key areas of the business, so that the Board can assess whether the Company and its management are operating within an acceptable level of risk; and</li> <li>(b) engagement of external experts and advisers where required to ensure the Company's risk management framework is upheld.</li> </ul>
<p><b><u>Recommendation 7.3</u></b></p> <p>A listed entity should disclose:</p> <ul style="list-style-type: none"> <li>(a) if it has an internal audit function, how the function is structured and what role it performs; or</li> <li>(b) if it does not have an internal audit function, that fact and the processes it employs for evaluating and continually improving the effectiveness of its risk management and internal control processes.</li> </ul>	<p>The Company will not have an internal audit function until the Company's operations are of a sufficient number and magnitude to be of benefit to the Company.</p> <p>The Company's risk management framework is designed to assist the Company to identify, assess, monitor and manage its business risks, including any material changes to its risk profile. The Board devotes time during Board meetings to ensuring that the Company maintains effective risk management and internal control systems and processes.</p>
<p><b><u>Recommendation 8.1</u></b></p> <p>The Board should establish a remuneration committee which has at least three</p>	<p>The Board has not established a separate remuneration committee. Given the present size of the company, the Board has decided</p>

Recommendations	Explanation for Departure
<p>members, a majority of whom are independent and which is chaired by an independent director.</p> <p>If it does not have a remuneration committee, disclose that fact and the processes it employs for setting the level and composition of remuneration for directors and senior executives and ensuring that such remuneration is appropriate and not excessive</p>	<p>that the full Board can adequately discharge the functions of a remuneration committee for the time being.</p> <p>The Board will establish a Remuneration Committee when the size and complexity of the Company's operations and management warrant it.</p> <p>In the meantime, the Board has adopted a Remuneration Committee Charter, which includes principles for setting and reviewing the level and composition of remuneration for directors and senior executives and ensuring that such remuneration is appropriate and not excessive. Until such time as the Remuneration Committee is established, the functions of this committee will continue to be carried out by the full Board.</p>

(c) **Agreements with Directors or Related Parties**

The Company's policy in respect of related party arrangements is:

- (i) a Director with a material personal interest in a matter is required to give notice to the other Directors before such a matter is considered by the Board; and
- (ii) for the Board to consider such a matter and unless the independent Directors determine otherwise, the Director who has a material personal interest is not present while the matter is being considered at the meeting and does not vote on the matter.

(d) **Control**

Upon listing the ME Group will hold 20.6 million Shares, or approximately 30.6% of the Company's issued Shares. It will also have two nominees on the Board (Messrs Mota and Shaw). The ME Group will also hold 18.75 million Performance Rights. Whilst these vest upon milestones being reached, they will only convert to Shares in circumstances that the ME Group either does not increase its voting power, or does so using the "3% creep" exception to the prohibition in the Corporations Act to a person increasing their voting power over 20%. The maximum voting power the ME Group can acquire, assuming all convertible securities convert to Shares and no other Shares are issued, will be approximately 41.33%.

Subject to the number (by Shares held) of Shareholders who vote at a general meeting of Shareholders, the ME Group will not be able to determine the vote at Shareholder meetings. However, the ME Group will by virtue of its shareholding have some ability to control the outcome of meetings of Shareholders. Furthermore, under the Share Sale Agreement, the ME Group will have the right to appoint up to two of the four board nominees to the board of the Company and although these nominees may not be able to approve resolutions of the Board of the Company, where all Directors are entitled to participate, they may be able to block any resolution where its nominees are entitled to vote. These circumstances may lead to the Company not being able to implement its strategies and objectives for so long as the ME Group or its board nominees vote contrary to the recommendations of the remaining Directors of the Company. For further information in relation to the ME Group's right to appoint board nominees please refer to Section 7.2.

To assist in managing the above implications, the Company appointed an experienced Chairman (Mr Lucas) and will comply with the requirements of the Corporations Act and the ASX Listing Rules with respect to dealings between the Company and the ME Group. Mr Lucas is chairman and a partner at the boutique law firm Allion Partners and, going forward, is considered by the Board to be independent. For further information in relation to Mr Lucas' interests in his capacity as chairman and partner of Allion Partners please refer to Section 8.8.

For further information in relation to Luso, MEIML and the ME Group, please refer to Section 2.10.



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## 5. FINANCIAL INFORMATION

### 5.1 Introduction

The purpose of the inclusion of the financial information in this Section 5 is to illustrate the effects of the Offer on the Company.

Stantons Corporate Finance Pty Ltd (**Stantons**) has prepared an Independent Limited Assurance Report in respect of the historical financial information and the pro forma historical financial information, a copy of which is set out in Annexure B of this Prospectus.

This Section 5 contains the following financial information in relation to the Company:

- (a) historical statement of profit or loss for the periods 1 February 2022 to 30 June 2022 and 1 July to 31 December 2022;
- (b) historical statement of financial position as at 30 June 2022 and 31 December 2022; and
- (c) historical statement of cash flows for the periods 1 February 2022 to 30 June 2022 and 1 July to 31 December 2022;  
(together, the **Historical Financial Information**) and
- (d) pro forma consolidated statement of financial position as at 31 December 2022 and the associated details of the pro forma adjustments (the **Pro Forma Statement of Financial Position**).

Further financial information with respect to the Company is set out in the Independent Limited Assurance Report contained in Annexure B.

The Pro Forma Statement of Financial Position and the Independent Limited Assurance Report are collectively referred to as the **Financial Information**.

The Financial Information should be read together with the other information contained in this Prospectus, including:

- (a) the risk factors described in Section 6;
- (b) the description of the use of funds of the Offer described in Section 2.8; and
- (c) the Independent Limited Assurance Report, set out in Annexure B.

Please note that past performance is not an indication of future performance.

All amounts disclosed in the tables are presented in Australian dollars unless otherwise stated.

#### **Forecast Financial Information**

There are significant uncertainties associated with forecasting future revenues and expenses of the Company. Given the uncertainty as to the timing and outcome of the Company's growth strategies and the nature of the industry in which the Company operates, as well as the uncertain macro market and economic conditions, the Company's performance in any future period cannot be reliably estimated. As a result, and after consideration of ASIC Regulatory Guide 170 the Directors do not believe they have a reasonable basis to reliably forecast future earnings and accordingly forecast results have not been included in the Prospectus.

### 5.2 Basis of preparation and presentation of the Financial Information

The Directors are responsible for the preparation and presentation of the Historical Financial Information. The Historical Financial Information included in this Prospectus is intended to present potential investors with information to assist them in understanding the historical financial performance, cash flows and financial position of the Company.

The Historical Financial Information has been prepared in accordance with the recognition and measurement principles prescribed in Australian Accounting Standards (AAS) (including the Australian Accounting Interpretations), issued by the Australian Accounting Standards Board, which are consistent with International Financial Reporting Standards (IFRS) and interpretations issued by the International Accounting Standards Board.

The Pro Forma Statement of Financial Position has been prepared in accordance with the recognition and measurement requirements of AAS, other than that it includes certain adjustments which have been prepared in a manner consistent with the AAS requirements, which reflect the impact of certain transactions as if they had occurred on or before 31 December 2022.

The Pro Forma Statement of Financial Position does not reflect the actual statement of financial position of the Group as at 31 December 2022. However, the Company believes that it provides useful information as it illustrates the financial position of the Company as at 31 December 2022 on the basis that the Offer and other related pro-forma transactions were completed as at that date.

The Financial Information is presented in an abbreviated form and does not include all of the disclosures, statements or comparative information required by AAS applicable to annual financial reports prepared in accordance with the Corporations Act.

Accounting policies have been consistently applied throughout the period presented.

Significant accounting policies of the Company relevant to the Financial Information are set out in Section 5.7 below.

### Preparation of Historical Financial Information

The Historical Financial Information is presented on both a statutory and pro forma basis.

The Historical Financial Information for the periods ended 30 June 2022 and 31 December 2022 for the Company has been derived from the audited general purpose historical financial reports of the Company for the year ended 30 June 2022 and the reviewed general purpose historical financial reports of the Company for the six months ended 31 December 2022.

The financial statements of the Company for the year ended 30 June 2022 were audited by PKF Perth who issued an unmodified audit opinion. Their report did however contain a material uncertainty related to the going concern basis of accounting. The financial statements of the Company for the six months ended 31 December 2022 were subject to a review by PKF Perth who issued an unmodified audit conclusion. Their report did however contain a material uncertainty related to the going concern basis of accounting.

The Pro Forma Statement of Financial Position has been prepared for the purposes of inclusion in this Prospectus. The Pro Forma Statement of Financial Position has been derived from the Historical Financial Information, adjusted to reflect proposed transactions as set out in Section 5.6.

The Pro forma Statement of Financial Information presented in this Prospectus has been reviewed by Stantons, whose Independent Limited Assurance Report is attached to this Prospectus as Annexure B. Investors should note the scope and limitations of that report.

## 5.3 Historical Statement of Profit or Loss

The table below sets out the Company's statement of profit or loss for the periods from 1 February 2022 to 30 June 2022 and from 1 July to 31 December 2022.

	<b>Audited 1 Feb to 30 June 2022 \$</b>	<b>Reviewed 1 July to 31 December 2022 \$</b>
Other Income	-	-
Expenses	(266,413)	(510,615)
<b>Loss for the period</b>	<b>(266,413)</b>	<b>(510,615)</b>
Other comprehensive income:	-	-
<b>Total Comprehensive loss for the period</b>	<b>(266,413)</b>	<b>(510,615)</b>
<b>Loss attributable to owners of the Company</b>	<b>(266,413)</b>	<b>(510,615)</b>
<b>Total comprehensive loss attributable to owners of the Company</b>	<b>(266,413)</b>	<b>(510,615)</b>

The complete Statement of Profit or Loss and Other Comprehensive Income can be viewed in the Company's Annual Report for the 2022 Financial Year and the Financial Accounts dated 31 December 2022 at the Chilwa Minerals website at <https://www.chilwaminerals.com.au>.

#### 5.4 Historical Statement of Financial Position

	Audited 30 June 2022 \$	Reviewed 31 December 2022 \$
<b>Current Assets</b>		
Cash & cash equivalents	652,799	204,479
Other Assets	11,356	27,410
<b>Total Assets</b>	<b>664,155</b>	<b>231,889</b>
<b>Non-Current Assets</b>		
Exploration and Evaluation Assets	-	-
Property plant and equipment	-	8,645
<b>Total Non-Current Assets</b>	<b>-</b>	<b>8,645</b>
<b>Total Assets</b>	<b>664,155</b>	<b>240,534</b>
<b>Current Liabilities</b>		
Trade Creditors & Other Payables	110,566	197,561
<b>Total Liabilities</b>	<b>110,566</b>	<b>197,561</b>
<b>Net Assets/ (liabilities)</b>	<b>553,589</b>	<b>42,973</b>
<b>Equity</b>		
Issued capital	820,001	820,001
Accumulated losses	(266,413)	(777,028)
<b>Total Equity</b>	<b>553,589</b>	<b>42,973</b>

The complete Statement of Profit or Loss and Other Comprehensive Income can be viewed in the Company's Annual Report for the 2022 Financial Year and the Financial Accounts dated 31 December 2022 at the Company's website at <https://www.chilwaminerals.com.au> .

#### 5.5 Historical Statement of Cash Flows

The table below sets out the Company's statement of cash flows for the period from 1 February 2022 to 30 June 2022 and from 1 July to 31 December 2022.

	Audited 1 Feb to 30 June 2022 \$	Reviewed 1 July to 31 December 2022 \$
<b>Cash Flows from Operating Activities</b>		
Payments to suppliers and employees	(167,202)	(437,942)
<b>Net Cash (used in) Operating Activities</b>	<b>(167,202)</b>	<b>(437,942)</b>
<b>Cash Flows from Investing Activities</b>		
Purchase of property, plant and equipment and mine properties	-	(10,378)
<b>Net Cash used in Investing Activities</b>	<b>-</b>	<b>(10,378)</b>
<b>Cash Flows from Financing Activities</b>		
Proceeds from issue of shares	820,001	-
<b>Net cash provided by financing activities</b>	<b>820,001</b>	<b>-</b>
Net (decrease)/ increase in cash and cash equivalents	652,799	(448,320)
Cash and cash equivalents at the beginning of the period	-	652,799
<b>Cash and cash equivalents at the end of the period</b>	<b>652,799</b>	<b>204,479</b>

The complete Statement of Cash Flows can be viewed in the Company's Annual Reports for the 2022 Financial Year and the Financial Accounts dated 31 December 2022 at the Chilwa Minerals website at <https://www.chilwaminerals.com.au>.

## 5.6 Historical and Pro Forma Statement of Financial Position

The table below sets out the historical consolidated statement of financial position as at 31 December 2022, extracted without adjustment from the Company's reviewed financial statements, and the Pro Forma Statement of Financial Position assuming the completion of the Offer.

The Pro Forma Statement of Financial Position is provided for illustrative purposes only and is not represented as being necessarily indicative of the Company's view of its future financial position.

	Notes	Reviewed 31 December 2022 \$	Pro forma adjustment s \$	Pro-forma Balance 31 December 2022 \$
<b>Current Assets</b>				
Cash & cash equivalents	3	204,479	7,021,380	7,225,859
Trade & other receivables		27,410	-	27,410
<b>Total Current Assets</b>		<b>231,889</b>	<b>7,021,380</b>	<b>7,253,269</b>
<b>Non-Current Assets</b>				
Exploration asset	4	-	3,800,000	3,800,000
Property, plant, equipment		8,645	-	8,645
<b>Total Non-Current Assets</b>		<b>8,645</b>	<b>3,800,000</b>	<b>3,808,645</b>
<b>Total Assets</b>		<b>240,534</b>	<b>10,821,380</b>	<b>11,061,914</b>
<b>Current Liabilities</b>				

Trade & other payables		197,561	-	197,561
<b>Total Current Liabilities</b>		197,561	-	197,561
<b>Total Liabilities</b>		197,561	-	197,561
<b>Net Assets/ (liabilities)</b>		<b>42,973</b>	<b>10,821,380</b>	<b>10,864,353</b>
<b>Equity</b>				
Issued capital	5a	820,001	10,657,843	11,477,844
Option reserve	5b		303,611	303,611
Accumulated losses	5c	(777,028)	(140,074)	(917,102)
<b>Total Equity</b>		<b>42,973</b>	<b>10,821,380</b>	<b>10,864,353</b>

### Notes on the pro forma historical consolidated statement of financial position

The Pro Forma Statement of Financial Position as at 31 December 2022 is based on the audited statement of financial position of the Company as at 31 December 2022 incorporating the following adjustments:

- (a) Completion and full subscription of the IPO to raise \$8,000,000 (before costs) by the issue of 40,000,000 Shares at \$0.20 per Share.
- (b) Recognising the Chilwa Project as an exploration and evaluation asset as a result of the acquisition of 100% of the Chilwa Project, for the transfer of 19,000,000 Shares at a deemed issue price of \$0.20 per share and 18,750,000 Performance Rights.  
  
The Company believes that there is too much uncertainty to estimate the probability of the vesting conditions being met for each tranche of Performance Right. Therefore, the Board has taken a conservative approach and recognised \$nil value for Performance Rights as at 31 December 2022.
- (c) Recognising the issue of the three tranches of 1,000,000 Unlisted Options to be issued to the Lead Manager pursuant to the mandate between the parties exercisable at a 25%, 50% and 100% premium, respectively, to the IPO price of \$0.20.
- (d) Recognising the accrual of a Bonus of \$140,074 payable to Mr Buss (Managing Director) upon Listing.
- (e) Recognising the cash costs of the Issue, estimated at \$838,546.

Further details on the Pro Forma adjustments are provided on pages 61 and 64.

## 5.7 Notes to and Forming Part of the Historical Financial Information

### Note 1: Summary of significant accounting policies

#### (a) Basis of Preparation

The historical financial information has been prepared in accordance with the measurement and recognition (but not the disclosure) requirements of Australian Accounting Standards, Australian Accounting Interpretations and the Corporations Act 2001.

The financial report has been prepared on an accruals basis and is based on historical cost, modified, where applicable, by the measurement at fair value of selected non-current assets, financial assets and financial liabilities. Cost is based on the fair value of the consideration given in exchange for assets.

The pro forma Statement of Financial Position as at 31 December 2022 represents the audited financial position and adjusted for the transactions discussed in Note 2 to this report. The Statement of Financial Position should be read in conjunction with the notes set out in this report.

The Company is domiciled in Australia and all amounts are presented in Australian dollars, unless otherwise noted.

(b) **Historical cost convention**

The financial statements have been prepared under the historical cost convention, except for, where applicable, the revaluation of financial assets and liabilities at fair value through profit or loss, financial assets at fair value through other comprehensive income, investment properties, certain classes of property, plant and equipment and derivative financial instruments.

(c) **Critical accounting estimates**

The preparation of the financial statements requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Company's accounting policies.

(d) **Principles of consolidation**

The financial statements incorporate the assets and liabilities of Chilwa Minerals Limited ('Company') as at 31 December 2022 and the results for the period then ended. Chilwa Minerals Limited is referred to in these financial statements as the 'Company'.

(e) **Foreign currency transactions**

Foreign currency transactions are translated into Australian dollars using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at financial year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in profit or loss.

(f) **Foreign operations**

The assets and liabilities of foreign operations are translated into Australian dollars using the exchange rates at the reporting date. The revenues and expenses of foreign operations are translated into Australian dollars using the average exchange rates, which approximate the rates at the dates of the transactions, for the period. All resulting foreign exchange differences are recognised in other comprehensive income through the foreign currency reserve in equity.

The foreign currency reserve is recognised in profit or loss when the foreign operation or net investment is disposed of.

(g) **Revenue recognition**

The Company recognises revenue as follows:

(i) **Revenue from contracts with customers**

Revenue is recognised at an amount that reflects the consideration to which the Company is expected to be entitled in exchange for transferring goods or services to a customer. For each contract with a customer, the Company: identifies the contract with a customer; identifies the performance obligations in the contract; determines the transaction price which takes into account estimates of variable consideration and the time value of money; allocates the transaction price to the separate performance obligations on the basis of the relative stand-alone selling price of each distinct good or service to be delivered; and recognises revenue when or as each performance obligation is satisfied in a manner that depicts the transfer to the customer of the goods or services promised.

Variable consideration within the transaction price, if any, reflects concessions provided to the customer such as discounts, rebates and refunds, any potential bonuses receivable from the customer and any other contingent events. Such estimates are determined using either the 'expected value' or 'most likely amount' method. The measurement of variable consideration is subject to a constraining principle whereby revenue will only be recognised to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur. The measurement constraint continues until the uncertainty associated with the variable consideration is subsequently resolved. Amounts

received that are subject to the constraining principle are recognised as a refund liability.

(ii) **Sale of goods**

Revenue from the sale of goods is recognised at the point in time when the customer obtains control of the goods, which is generally at the time of delivery.

(iii) **Rendering of services**

Revenue from a contract to provide services is recognised over time as the services are rendered based on either a fixed price or an hourly rate.

(iv) **Interest**

Interest revenue is recognised as interest accrues using the effective interest method. This is a method of calculating the amortised cost of a financial asset and allocating the interest income over the relevant period using the effective interest rate, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to the net carrying amount of the financial asset.

(v) **Rent**

Rent revenue from investment properties is recognised on a straight-line basis over the lease term. Lease incentives granted are recognised as part of the rental revenue. Contingent rentals are recognised as income in the period when earned.

(vi) **Other revenue**

Other revenue is recognised when it is received or when the right to receive payment is established.

(h) **Government grants**

Government grants relating to costs are deferred and recognised in profit or loss over the period necessary to match them with the costs that they are intended to compensate.

(i) **Income tax**

The income tax expense or benefit for the period is the tax payable on that period's taxable income based on the applicable income tax rate for each jurisdiction, adjusted by the changes in deferred tax assets and liabilities attributable to temporary differences, unused tax losses and the adjustment recognised for prior periods, where applicable.

Deferred tax assets and liabilities are recognised for temporary differences at the tax rates expected to be applied when the assets are recovered or liabilities are settled, based on those tax rates that are enacted or substantively enacted, except for:

- (i) When the deferred income tax asset or liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and that, at the time of the transaction, affects neither the accounting nor taxable profits; or
- (ii) When the taxable temporary difference is associated with interests in subsidiaries, associates or joint ventures, and the timing of the reversal can be controlled and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax assets are recognised for deductible temporary differences and unused tax losses only if it is probable that future taxable amounts will be available to utilise those temporary differences and losses.

The carrying amount of recognised and unrecognised deferred tax assets are reviewed at each reporting date. Deferred tax assets recognised are reduced to the extent that it is no longer probable that future taxable profits will be available for the carrying amount to be recovered. Previously unrecognised deferred tax assets are recognised to the extent that it is probable that there are future taxable profits available to recover the asset.

Deferred tax assets and liabilities are offset only where there is a legally enforceable right to offset current tax assets against current tax liabilities and deferred tax assets against deferred

tax liabilities; and they relate to the same taxable authority on either the same taxable entity or different taxable entities which intend to settle simultaneously.

Chilwa Minerals Limited accounts for its own current and deferred tax amounts.

(j) **Current and non-current classification**

Assets and liabilities are presented in the statement of financial position based on current and non-current classification.

An asset is classified as current when: it is either expected to be realised or intended to be sold or consumed in the Company's normal operating cycle; it is held primarily for the purpose of trading; it is expected to be realised within 12 months after the reporting period; or the asset is cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period. All other assets are classified as non-current.

A liability is classified as current when: it is either expected to be settled in the Company's normal operating cycle; it is held primarily for the purpose of trading; it is due to be settled within 12 months after the reporting period; or there is no unconditional right to defer the settlement of the liability for at least 12 months after the reporting period. All other liabilities are classified as non-current.

Deferred tax assets and liabilities are always classified as non-current.

(k) **Cash and cash equivalents**

Cash and cash equivalents includes cash on hand, deposits held at call with financial institutions, other short-term, highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value. For the statement of cash flows presentation purposes, cash and cash equivalents also includes bank overdrafts, which are shown within borrowings in current liabilities on the statement of financial position.

(l) **Trade and other receivables**

Trade receivables are initially recognised at fair value and subsequently measured at amortised cost using the effective interest method, less any allowance for expected credit losses. Trade receivables are generally due for settlement within 30 days.

The Company has applied the simplified approach to measuring expected credit losses, which uses a lifetime expected loss allowance. To measure the expected credit losses, trade receivables have been grouped based on days overdue.

Other receivables are recognised at amortised cost, less any allowance for expected credit losses.

(m) **Contract assets**

Contract assets are recognised when the Company has transferred goods or services to the customer but where the Company is yet to establish an unconditional right to consideration. Contract assets are treated as financial assets for impairment purposes.

(n) **Customer acquisition costs**

Customer acquisition costs are capitalised as an asset where such costs are incremental to obtaining a contract with a customer and are expected to be recovered. Customer acquisition costs are amortised on a straight-line basis over the term of the contract.

Costs to obtain a contract that would have been incurred regardless of whether the contract was obtained or which are not otherwise recoverable from a customer are expensed as incurred to profit or loss. Incremental costs of obtaining a contract where the contract term is less than one year is immediately expensed to profit or loss.

(o) **Customer fulfilment costs**

Customer fulfilment costs are capitalised as an asset when all the following are met: (i) the costs relate directly to the contract or specifically identifiable proposed contract; (ii) the costs generate or enhance resources of the Company that will be used to satisfy future performance



obligations; and (iii) the costs are expected to be recovered. Customer fulfilment costs are amortised on a straight-line basis over the term of the contract.

(p) **Right of return assets**

Right of return assets represents the right to recover inventory sold to customers and is based on an estimate of customers who may exercise their right to return the goods and claim a refund. Such rights are measured at the value at which the inventory was previously carried prior to sale, less expected recovery costs and any impairment.

(q) **Inventories**

Inventories are stated at the lower of cost and net realisable value on a 'first in first out' basis. Cost comprises direct materials and delivery costs, direct labour, import duties and other taxes, an appropriate proportion of variable and fixed overhead expenditure based on normal operating capacity, and, where applicable, transfers from cash flow hedging reserves in equity. Costs of purchased inventory are determined after deducting rebates and discounts received or receivable.

Stock in transit is stated at the lower of cost and net realisable value. Cost comprises of purchase and delivery costs, net of rebates and discounts received or receivable.

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

(r) **Derivative financial instruments**

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently remeasured to their fair value at each reporting date. The accounting for subsequent changes in fair value depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged.

(s) **Cash flow hedges**

Cash flow hedges may be used to cover the Company's exposure to variability in cash flows that is attributable to particular risks associated with a recognised asset or liability or a firm commitment which could affect profit or loss. The effective portion of the gain or loss on the hedging instrument is recognised in other comprehensive income through the cash flow hedges reserve in equity, whilst the ineffective portion is recognised in profit or loss. Amounts taken to equity are transferred out of equity and included in the measurement of the hedged transaction when the forecast transaction occurs.

Cash flow hedges are tested for effectiveness on a regular basis both retrospectively and prospectively to ensure that each hedge is highly effective and continues to be designated as a cash flow hedge. If the forecast transaction is no longer expected to occur, the amounts recognised in equity are transferred to profit or loss.

If the hedging instrument is sold, terminated, expires, exercised without replacement or rollover, or if the hedge becomes ineffective and is no longer a designated hedge, the amounts previously recognised in equity remain in equity until the forecast transaction occurs.

(t) **Non-current assets or disposal groups classified as held for sale**

Non-current assets and assets of disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continued use. They are measured at the lower of their carrying amount and fair value less costs of disposal. For non-current assets or assets of disposal groups to be classified as held for sale, they must be available for immediate sale in their present condition and their sale must be highly probable.

An impairment loss is recognised for any initial or subsequent write down of the non-current assets and assets of disposal groups to fair value less costs of disposal. A gain is recognised for any subsequent increases in fair value less costs of disposal of a non-current assets and assets of disposal groups, but not in excess of any cumulative impairment loss previously recognised.

Non-current assets are not depreciated or amortised while they are classified as held for sale. Interest and other expenses attributable to the liabilities of assets held for sale continue to be recognised.

Non-current assets classified as held for sale and the assets of disposal groups classified as held for sale are presented separately on the face of the statement of financial position, in current assets. The liabilities of disposal groups classified as held for sale are presented separately on the face of the statement of financial position, in current liabilities.

(u) **Joint ventures**

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement. Investments in joint ventures are accounted for using the equity method. Under the equity method, the share of the profits or losses of the joint venture is recognised in profit or loss and the share of the movements in equity is recognised in other comprehensive income. Investments in joint ventures are carried in the statement of financial position at cost plus post-acquisition changes in the Company's share of net assets of the joint venture. Goodwill relating to the joint venture is included in the carrying amount of the investment and is neither amortised nor individually tested for impairment. Income earned from joint venture entities reduce the carrying amount of the investment.

(v) **Joint operations**

A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement. The Company has recognised its share of jointly held assets, liabilities, revenues and expenses of joint operations. These have been incorporated in the financial statements under the appropriate classifications.

(w) **Investments and other financial assets**

Investments and other financial assets are initially measured at fair value. Transaction costs are included as part of the initial measurement, except for financial assets at fair value through profit or loss. Such assets are subsequently measured at either amortised cost or fair value depending on their classification. Classification is determined based on both the business model within which such assets are held and the contractual cash flow characteristics of the financial asset unless an accounting mismatch is being avoided.

Financial assets are derecognised when the rights to receive cash flows have expired or have been transferred and the Company has transferred substantially all the risks and rewards of ownership. When there is no reasonable expectation of recovering part or all of a financial asset, its carrying value is written off.

(x) **Financial assets at fair value through profit or loss**

Financial assets not measured at amortised cost or at fair value through other comprehensive income are classified as financial assets at fair value through profit or loss. Typically, such financial assets will be either: (i) held for trading, where they are acquired for the purpose of selling in the short-term with an intention of making a profit, or a derivative; or (ii) designated as such upon initial recognition where permitted. Fair value movements are recognised in profit or loss.

(y) **Financial assets at fair value through other comprehensive income**

Financial assets at fair value through other comprehensive income include equity investments which the Company intends to hold for the foreseeable future and has irrevocably elected to classify them as such upon initial recognition.

(z) **Impairment of financial assets**

The Company recognises a loss allowance for expected credit losses on financial assets which are either measured at amortised cost or fair value through other comprehensive income. The measurement of the loss allowance depends upon the Company's assessment at the end of each reporting period as to whether the financial instrument's credit risk has increased significantly since initial recognition, based on reasonable and supportable information that is available, without undue cost or effort to obtain.

Where there has not been a significant increase in exposure to credit risk since initial recognition, a 12-month expected credit loss allowance is estimated. This represents a portion of the asset's lifetime expected credit losses that is attributable to a default event that is possible within the next 12 months. Where a financial asset has become credit impaired or where it is determined that credit risk has increased significantly, the loss allowance is based on the asset's lifetime expected credit losses. The amount of expected credit loss recognised is measured on the basis of the probability weighted present value of anticipated cash shortfalls over the life of the instrument discounted at the original effective interest rate.

For financial assets mandatorily measured at fair value through other comprehensive income, the loss allowance is recognised in other comprehensive income with a corresponding expense through profit or loss. In all other cases, the loss allowance reduces the asset's carrying value with a corresponding expense through profit or loss.

(aa) **Investment properties**

Investment properties principally comprise of freehold land and buildings held for long-term rental and capital appreciation that are not occupied by the Company. Investment properties are initially recognised at cost, including transaction costs, and are subsequently remeasured annually at fair value. Movements in fair value are recognised directly to profit or loss.

Investment properties are derecognised when disposed of or when there is no future economic benefit expected.

Transfers to and from investment properties to property, plant and equipment are determined by a change in use of owner-occupation. The fair value on the date of change of use from investment properties to property, plant and equipment are used as deemed cost for the subsequent accounting. The existing carrying amount of property, plant and equipment is used for the subsequent accounting cost of investment properties on the date of change of use.

Investment properties also include properties under construction for future use as investment properties. These are carried at fair value, or at cost where fair value cannot be reliably determined and the construction is incomplete.

(bb) **Property, plant and equipment**

Land and buildings are shown at fair value, based on periodic, at least every 3 years, valuations by external independent valuers, less subsequent depreciation and impairment for buildings. The valuations are undertaken more frequently if there is a material change in the fair value relative to the carrying amount. Any accumulated depreciation at the date of revaluation is eliminated against the gross carrying amount of the asset and the net amount is restated to the revalued amount of the asset. Increases in the carrying amounts arising on revaluation of land and buildings are credited in other comprehensive income through to the revaluation surplus reserve in equity. Any revaluation decrements are initially taken in other comprehensive income through to the revaluation surplus reserve to the extent of any previous revaluation surplus of the same asset. Thereafter the decrements are taken to profit or loss.

Plant and equipment is stated at historical cost less accumulated depreciation and impairment. Historical cost includes expenditure that is directly attributable to the acquisition of the items.

Depreciation is calculated on a straight-line basis to write off the net cost of each item of property, plant and equipment (excluding land) over their expected useful lives as follows:

Buildings	40 years
Leasehold improvements	3-10 years
Plant and equipment	3-7 years

The residual values, useful lives and depreciation methods are reviewed, and adjusted if appropriate, at each reporting date.

Leasehold improvements are depreciated over the unexpired period of the lease or the estimated useful life of the assets, whichever is shorter.

An item of property, plant and equipment is derecognised upon disposal or when there is no future economic benefit to the Company. Gains and losses between the carrying amount and

the disposal proceeds are taken to profit or loss. Any revaluation surplus reserve relating to the item disposed of is transferred directly to retained profits.

(cc) **Right-of-use assets**

A right-of-use asset is recognised at the commencement date of a lease. The right-of-use asset is measured at cost, which comprises the initial amount of the lease liability, adjusted for, as applicable, any lease payments made at or before the commencement date net of any lease incentives received, any initial direct costs incurred, and, except where included in the cost of inventories, an estimate of costs expected to be incurred for dismantling and removing the underlying asset, and restoring the site or asset.

Right-of-use assets are depreciated on a straight-line basis over the unexpired period of the lease or the estimated useful life of the asset, whichever is the shorter. Where the Company expects to obtain ownership of the leased asset at the end of the lease term, the depreciation is over its estimated useful life. Right-of-use assets are subject to impairment or adjusted for any remeasurement of lease liabilities.

The Company has elected not to recognise a right-of-use asset and corresponding lease liability for short-term leases with terms of 12 months or less and leases of low-value assets. Lease payments on these assets are expensed to profit or loss as incurred.

(dd) **Exploration and evaluation assets**

Exploration and evaluation expenditure in relation to separate areas of interest for which rights of tenure are current is carried forward as an asset in the statement of financial position where it is expected that the expenditure will be recovered through the successful development and exploitation of an area of interest, or by its sale; or exploration activities are continuing in an area and activities have not reached a stage which permits a reasonable estimate of the existence or otherwise of economically recoverable reserves. Where a project or an area of interest has been abandoned, the expenditure incurred thereon is written off in the year in which the decision is made.

(ee) **Mining assets**

Capitalised mining development costs include expenditures incurred to develop new ore bodies to define further mineralisation in existing ore bodies, to expand the capacity of a mine and to maintain production. Mining development also includes costs transferred from exploration and evaluation phase once production commences in the area of interest.

Amortisation of mining development is computed by the units of production basis over the estimated proved and probable reserves. Proved and probable mineral reserves reflect estimated quantities of economically recoverable reserves which can be recovered in the future from known mineral deposits. These reserves are amortised from the date on which production commences. The amortisation is calculated from recoverable proven and probable reserves and a predetermined percentage of the recoverable measured, indicated and inferred resource. This percentage is reviewed annually.

Restoration costs expected to be incurred are provided for as part of development phase that give rise to the need for restoration.

(ff) **Impairment of non-financial assets**

Non-financial assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount.

Recoverable amount is the higher of an asset's fair value less costs of disposal and value-in-use. The value-in-use is the present value of the estimated future cash flows relating to the asset using a pre-tax discount rate specific to the asset or cash-generating unit to which the asset belongs. Assets that do not have independent cash flows are grouped together to form a cash-generating unit.

(gg) **Trade and other payables**

These amounts represent liabilities for goods and services provided to the Company prior to the end of the financial year and which are unpaid. Due to their short-term nature they are measured at amortised cost and are not discounted. The amounts are unsecured and are usually paid within 30 days of recognition.

(hh) **Contract liabilities**

Contract liabilities represent the Company's obligation to transfer goods or services to a customer and are recognised when a customer pays consideration, or when the Company recognises a receivable to reflect its unconditional right to consideration (whichever is earlier) before the Company has transferred the goods or services to the customer.

(ii) **Refund liabilities**

Refund liabilities are recognised where the Company receives consideration from a customer and expects to refund some, or all, of that consideration to the customer. A refund liability is measured at the amount of consideration received or receivable for which the Company does not expect to be entitled and is updated at the end of each reporting period for changes in circumstances. Historical data is used across product lines to estimate such returns at the time of sale based on an expected value methodology.

(jj) **Borrowings**

Loans and borrowings are initially recognised at the fair value of the consideration received, net of transaction costs. They are subsequently measured at amortised cost using the effective interest method.

The component of the convertible notes that exhibits characteristics of a liability is recognised as a liability in the statement of financial position, net of transaction costs.

On the issue of the convertible notes the fair value of the liability component is determined using a market rate for an equivalent non-convertible bond and this amount is carried as a non-current liability on the amortised cost basis until extinguished on conversion or redemption. The increase in the liability due to the passage of time is recognised as a finance cost. The remainder of the proceeds are allocated to the conversion option that is recognised and included in shareholders equity as a convertible note reserve, net of transaction costs. The carrying amount of the conversion option is not remeasured in the subsequent years. The corresponding interest on convertible notes is expensed to profit or loss.

(kk) **Lease liabilities**

A lease liability is recognised at the commencement date of a lease. The lease liability is initially recognised at the present value of the lease payments to be made over the term of the lease, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Company's incremental borrowing rate. Lease payments comprise of fixed payments less any lease incentives receivable, variable lease payments that depend on an index or a rate, amounts expected to be paid under residual value guarantees, exercise price of a purchase option when the exercise of the option is reasonably certain to occur, and any anticipated termination penalties. The variable lease payments that do not depend on an index or a rate are expensed in the period in which they are incurred.

Lease liabilities are measured at amortised cost using the effective interest method. The carrying amounts are remeasured if there is a change in the following: future lease payments arising from a change in an index or a rate used; residual guarantee; lease term; certainty of a purchase option and termination penalties. When a lease liability is remeasured, an adjustment is made to the corresponding right-of use asset, or to profit or loss if the carrying amount of the right-of-use asset is fully written down.

(ll) **Finance costs**

Finance costs attributable to qualifying assets are capitalised as part of the asset. All other finance costs are expensed in the period in which they are incurred.

(mm) **Provisions**

Provisions are recognised when the Company has a present (legal or constructive) obligation as a result of a past event, it is probable the Company will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation. The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the reporting date, taking into account the risks and uncertainties surrounding the obligation. If the time value of money is material, provisions are discounted using a current pre-tax rate specific to the liability. The increase in the provision resulting from the passage of time is recognised as a finance cost.

(nn) **Employee benefits**

Short-term employee benefits

Liabilities for wages and salaries, including non-monetary benefits, annual leave and long service leave expected to be settled wholly within 12 months of the reporting date are measured at the amounts expected to be paid when the liabilities are settled.

Other long-term employee benefits

The liability for annual leave and long service leave not expected to be settled within 12 months of the reporting date are measured at the present value of expected future payments to be made in respect of services provided by employees up to the reporting date using the projected unit credit method. Consideration is given to expected future wage and salary levels, experience of employee departures and periods of service. Expected future payments are discounted using market yields at the reporting date on corporate bonds with terms to maturity and currency that match, as closely as possible, the estimated future cash outflows.

Defined contribution superannuation expense

Contributions to defined contribution superannuation plans are expensed in the period in which they are incurred.

Share-based payments

Equity-settled and cash-settled share-based compensation benefits are provided to employees.

Equity-settled transactions are awards of shares, or options over shares, that are provided to employees in exchange for the rendering of services. Cash-settled transactions are awards of cash for the exchange of services, where the amount of cash is determined by reference to the share price.

The cost of equity-settled transactions are measured at fair value on grant date. Fair value is independently determined using either the Binomial or Black-Scholes option pricing model that takes into account the exercise price, the term of the option, the impact of dilution, the share price at grant date and expected price volatility of the underlying share, the expected dividend yield and the risk free interest rate for the term of the option, together with non-vesting conditions that do not determine whether the Company receives the services that entitle the employees to receive payment. No account is taken of any other vesting conditions.

The cost of equity-settled transactions are recognised as an expense with a corresponding increase in equity over the vesting period. The cumulative charge to profit or loss is calculated based on the grant date fair value of the award, the best estimate of the number of awards that are likely to vest and the expired portion of the vesting period. The amount recognised in profit or loss for the period is the cumulative amount calculated at each reporting date less amounts already recognised in previous periods.

The cost of cash-settled transactions is initially, and at each reporting date until vested, determined by applying either the Binomial or Black-Scholes option pricing model, taking into consideration the terms and conditions on which the award was granted. The cumulative charge to profit or loss until settlement of the liability is calculated as follows:

- (i) during the vesting period, the liability at each reporting date is the fair value of the award at that date multiplied by the expired portion of the vesting period.

- (ii) from the end of the vesting period until settlement of the award, the liability is the full fair value of the liability at the reporting date.

All changes in the liability are recognised in profit or loss. The ultimate cost of cash-settled transactions is the cash paid to settle the liability.

Market conditions are taken into consideration in determining fair value. Therefore any awards subject to market conditions are considered to vest irrespective of whether or not that market condition has been met, provided all other conditions are satisfied.

If equity-settled awards are modified, as a minimum an expense is recognised as if the modification has not been made. An additional expense is recognised, over the remaining vesting period, for any modification that increases the total fair value of the share-based compensation benefit as at the date of modification.

If the non-vesting condition is within the control of the Company or employee, the failure to satisfy the condition is treated as a cancellation. If the condition is not within the control of the Company or employee and is not satisfied during the vesting period, any remaining expense for the award is recognised over the remaining vesting period, unless the award is forfeited.

If equity-settled awards are cancelled, it is treated as if it has vested on the date of cancellation, and any remaining expense is recognised immediately. If a new replacement award is substituted for the cancelled award, the cancelled and new award is treated as if they were a modification.

(oo) **Fair value measurement**

When an asset or liability, financial or non-financial, is measured at fair value for recognition or disclosure purposes, the fair value is based on the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date; and assumes that the transaction will take place either: in the principal market; or in the absence of a principal market, in the most advantageous market.

Fair value is measured using the assumptions that market participants would use when pricing the asset or liability, assuming they act in their economic best interests. For non-financial assets, the fair value measurement is based on its highest and best use. Valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, are used, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

Assets and liabilities measured at fair value are classified into three levels, using a fair value hierarchy that reflects the significance of the inputs used in making the measurements. Classifications are reviewed at each reporting date and transfers between levels are determined based on a reassessment of the lowest level of input that is significant to the fair value measurement.

For recurring and non-recurring fair value measurements, external valuers may be used when internal expertise is either not available or when the valuation is deemed to be significant. External valuers are selected based on market knowledge and reputation. Where there is a significant change in fair value of an asset or liability from one period to another, an analysis is undertaken, which includes a verification of the major inputs applied in the latest valuation and a comparison, where applicable, with external sources of data.

(pp) **Issued capital**

Ordinary shares are classified as equity.

Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

(qq) **Dividends**

Dividends are recognised when declared during the financial year and are no longer at the discretion of the company.

(rr) **Business combinations**

The acquisition method of accounting is used to account for business combinations regardless of whether equity instruments or other assets are acquired.

The consideration transferred is the sum of the acquisition-date fair values of the assets transferred, equity instruments issued or liabilities incurred by the acquirer to former owners of the acquiree and the amount of any non-controlling interest in the acquiree. For each business combination, the non-controlling interest in the acquiree is measured at either fair value or at the proportionate share of the acquiree's identifiable net assets. All acquisition costs are expensed as incurred to profit or loss.

On the acquisition of a business, the Company assesses the financial assets acquired and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic conditions, the Company's operating or accounting policies and other pertinent conditions in existence at the acquisition-date.

Where the business combination is achieved in stages, the Company remeasures its previously held equity interest in the acquiree at the acquisition-date fair value and the difference between the fair value and the previous carrying amount is recognised in profit or loss.

Contingent consideration to be transferred by the acquirer is recognised at the acquisition-date fair value. Subsequent changes in the fair value of the contingent consideration classified as an asset or liability is recognised in profit or loss. Contingent consideration classified as equity is not remeasured and its subsequent settlement is accounted for within equity.

The difference between the acquisition-date fair value of assets acquired, liabilities assumed and any non-controlling interest in the acquiree and the fair value of the consideration transferred and the fair value of any pre-existing investment in the acquiree is recognised as goodwill. If the consideration transferred and the pre-existing fair value is less than the fair value of the identifiable net assets acquired, being a bargain purchase to the acquirer, the difference is recognised as a gain directly in profit or loss by the acquirer on the acquisition-date, but only after a reassessment of the identification and measurement of the net assets acquired, the non-controlling interest in the acquiree, if any, the consideration transferred and the acquirer's previously held equity interest in the acquirer.

Business combinations are initially accounted for on a provisional basis. The acquirer retrospectively adjusts the provisional amounts recognised and also recognises additional assets or liabilities during the measurement period, based on new information obtained about the facts and circumstances that existed at the acquisition-date. The measurement period ends on either the earlier of (i) 12 months from the date of the acquisition or (ii) when the acquirer receives all the information possible to determine fair value.

(ss) **Earnings per share**

Basic earnings per share

Basic earnings per share is calculated by dividing the profit attributable to the owners of Chilwa Minerals Limited, excluding any costs of servicing equity other than ordinary shares, by the weighted average number of ordinary shares outstanding during the financial year, adjusted for bonus elements in ordinary shares issued during the financial year.

Diluted earnings per share

Diluted earnings per share adjusts the figures used in the determination of basic earnings per share to take into account the after income tax effect of interest and other financing costs associated with dilutive potential ordinary shares and the weighted average number of shares assumed to have been issued for no consideration in relation to dilutive potential ordinary shares.

(tt) **Goods and Services Tax ('GST') and other similar taxes**

Revenues, expenses and assets are recognised net of the amount of associated GST, unless the GST incurred is not recoverable from the tax authority. In this case it is recognised as part of the cost of the acquisition of the asset or as part of the expense.



Receivables and payables are stated inclusive of the amount of GST receivable or payable. The net amount of GST recoverable from, or payable to, the tax authority is included in other receivables or other payables in the statement of financial position.

Cash flows are presented on a gross basis. The GST components of cash flows arising from investing or financing activities which are recoverable from, or payable to the tax authority, are presented as operating cash flows.

Commitments and contingencies are disclosed net of the amount of GST recoverable from, or payable to, the tax authority.

(uu) **New Accounting Standards and Interpretations not yet mandatory or early adopted**

Australian Accounting Standards and Interpretations that have recently been issued or amended but are not yet mandatory, have not been early adopted by the Company for the annual reporting period ended 30 June 2022 or the Half Year ended 31 December 2022. The Company has not yet assessed the impact of these new or amended Accounting Standards and Interpretations.

**Note 2: Actual and Proposed Transactions to Arrive at the Pro-Forma Financial Information**

The pro-forma historical financial information has been prepared by adjusting the statement of financial position of the Company as at 31 December 2022 to reflect the financial effects of the following pro forma transactions which are yet to occur, but are proposed to occur following completion of the capital raising:

(a) Completion and full subscription of the IPO to raise \$8,000,000 (before costs) by the issue of 40,000,000 Shares at \$0.20 per Share.

(b) Recognising the Chilwa Project as an Exploration and evaluation asset through the acquisition of 100% of the Chilwa Project, for the transfer of 19,000,000 Shares in Chilwa at a deemed issue price of \$0.20 per share and 18,750,000 Performance Rights.

The Company's believes that there is too much uncertainty to estimate the probability of the vesting conditions being met for each tranche of Performance Right. Therefore the Board has taken a conservative approach and recognised \$nil value for the Performance Rights as at 31 December 2022

(c) Recognising the issue of the three, Tranches of 1,000,000 Unlisted Options to be issued to the Lead Manager pursuant to the mandate between the parties exercisable at a 25% 50% and 100% premium, respectively, to the IPO price of \$0.20.

(d) Recognising the Bonus payable to the Managing Director upon the successful listing on the ASX.

(e) Recognising the costs of the Issue including the Lead Manager's fees.

**Note 3: Cash & Cash Equivalents**

	<b>Pro-forma balance 31 December 2022</b>
	<b>\$</b>
<b>Cash and cash equivalents</b>	<b>7,225,859</b>
Bank balance as at 31 December 2022	204,479
<i>Pro-forma adjustments:</i>	
Proceeds from shares issued under the offer	8,000,000
Payment of Managing Director's bonus	(140,074)
<u>Expenses of the offer (including the Lead Managers Fees)</u>	<u>(838,546)</u>

<b>Total</b>	<b>7,225,859</b>
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**Note 4: Exploration assets**

	Pro-forma balance 31 December 2022 \$
<b>Exploration assets</b>	<b>3,800,000</b>
Balance as at 31 December 2022	-
<i>Pro-forma adjustments:</i>	
Acquisition cost of the Chilwa Project 19,000,000 FPO Shares	3,800,000
<b>Total</b>	<b>3,800,000</b>

**Note 5: Equity**

	Issued Shares	Pro-forma balance 31 December 2022 \$
	#	
<b>(a) Issued capital</b>		<b>11,477,844</b>
Balance as at 31 December 2022	8,200,001	820,001
<i>Pro-forma adjustments:</i>		
Issue of shares under the offer	40,000,000	8,000,000
Cost of Options		(303,611)
Expenses of the offer (including the Lead Managers fees)	-	(838,546)
Issue of shares to Vendor	19,000,000	3,800,000
<b>Total issued capital</b>	<b>67,200,001</b>	<b>11,477,844</b>
<b>(b) Options Reserve</b>		<b>303,611</b>
Balance as at 31 December 2022		-
<i>Pro-forma adjustments:</i>		
Recognition of the Lead Manager Options being 3 tranches of 1.0 million options exercisable \$0.25, 0.30 and 0.40 being a 25%, 50% and 100% premium, respectively, to the IPO Price.		303,611
<b>Total</b>		<b>303,611</b>

<b>(c) Accumulated losses</b>	<b>(917,102)</b>
Balance as at 31 December 2022	(777,028)
<b>Pro-forma adjustments:</b>	
Payment of Managing Director's bonus	(140,074)
<b>Total</b>	<b>(917,102)</b>

### Note 7: Lead Manager Options

Refer to Section 7.5 of the Prospectus for details of the Mandate between the Company and the Lead Manager.

#### Tranche 1

Underlying value of the security	\$0.20
Exercise price	\$0.25
Life of Options in years	4
Volatility	80%
Risk free rate	2.87%
Number of Options	1,000,000
<b>Valuation per Option</b>	<b>\$0.1107</b>

#### Tranche 2

Underlying value of the security	\$0.20
Exercise price	\$0.30
Life of Options in years	4
Volatility	80%
Risk free rate	2.87%
Number of Options	1,000,000
<b>Valuation per Option</b>	<b>\$0.1028</b>

#### Tranche 3

Underlying value of the security	\$0.20
Exercise price	\$0.40

Life of Options in years	4
Volatility	80%
Risk free rate	2.87%
Number of Options	1,000,000
<b>Valuation per Option</b>	<b>\$0.0922</b>

**Note 8: Contingent Assets and Liabilities**

There are no contingent assets or liabilities as at 31 December 2022.

**Note 9: Matters subsequent to the end of the financial period**

The impact of the Coronavirus ('COVID-19') pandemic is ongoing for the company up to 31 December 2022, it is not practicable to estimate the potential impact, positive or negative, after the reporting date. The situation is rapidly developing and is dependent on measures imposed by the Australian Government and other countries, such as maintaining social distancing requirements, quarantine, travel restrictions and any economic stimulus that may be provided.

No other matter or circumstance has arisen since 31 December that has significantly affected, or may significantly affect the company's operations, the results of those operations, or the company's state of affairs in future financial years.

There has been no adjustment for the 6,250,000 Performance Rights that will be issued to Directors and management which are subject to vesting conditions (refer to Section 8.4). This is due to the prescribed accounting treatment of vesting conditions under AASB 2: Share Based and so the Performance Rights have not been recognised in the pro forma Statement of Financial Position as at 31 December 2022 and will instead be recognised over the expected vesting period.

The 18,750,000 Performance Rights to be issued to the Vendors have also been accounted for under AASB 2: Share Based Payments. As the vesting conditions do not contain a service period, the likelihood of the vesting conditions being met is assessed at the acquisition. The Board has taken a conservative approach and recognised \$nil value for the Performance Rights in the Pro Forma position as there is significant uncertainty as to whether the milestones will be met. The value of the Performance Rights recognised will be updated at each subsequent balance date if the number of Performance Rights expected to vest changes.

For further information, please refer to the Independent Limited Assurance Report in Annexure B.

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## **6. RISK FACTORS**

### **6.1 Introduction**

The Shares offered under this Prospectus are considered highly speculative. An investment in the Company is not risk free and the Directors strongly recommend potential investors to consider the risk factors described below, together with information contained elsewhere in this Prospectus, before deciding whether to apply for Shares and to consult their professional advisers before deciding whether to apply for Shares pursuant to this Prospectus.

There are specific risks which relate directly to the Company's business. In addition, there are other general risks, many of which are largely beyond the control of the Company and the Directors. The risks identified in this Section 6, or other risk factors, may have a material impact on the financial performance of the Company and the market price of the Shares.

The following is not intended to be an exhaustive list of the risk factors to which the Company is exposed.

### **6.2 Company specific**

The Company specific risks set out below are also summarised in Section 1.3 of this Prospectus.

(a) **Offer risk**

If ASX does not admit the Shares to Official Quotation before the expiration of three months after the date of issue of this Prospectus, or such period as varied by ASIC, the Company will not allot or issue any Shares and will repay all application monies for the Shares within the time prescribed under the Corporations Act, without interest.

(b) **Limited history**

The Company was incorporated on 1 February 2022 and has a limited operating history, upon which an evaluation of its prospects can be made. The prospects of the Company must be considered in light of the risks, expenses and difficulties frequently encountered by companies in the early stage of their development, particularly in the mining exploration sector, which has a high level of inherent uncertainty. While the Project has undergone previous exploration and appraisal work, further exploration and appraisals are required to determine whether the Project contains economically viable mineral deposits. Even if an apparently viable mineral deposit is identified, there is no guarantee it can be profitably exploited.

(c) **General risks associated with operating overseas**

The Company conducts and has interests in operations in Malawi.

Consequently, the Company will be subject to the risks associated with operating in Malawi. Such risks can include economic, social or political instability or change, inflation, currency non-convertibility or instability and changes of law affecting foreign ownership, government participation, taxation, working conditions, rates of exchange, exchange control, exploration licensing, export duties, repatriation of income or return of capital, environmental protection, mine safety, labour relations as well as government control over mineral properties or government regulations.

Changes to mining or investment policies and legislation or a shift in political attitude may adversely affect the Company's operations and profitability.

(d) **Exploration risks**

The Project currently has a JORC 2012 Inferred resource of 2.4 MT THM at a 1% cut-off and is considered prospective for further THM in both existing as well as previously unexplored areas of the licences. However, there is significant risk that further exploration may not be successful or may be delayed and cost more than currently anticipated.

(e) **Control**

Upon listing the ME Group will hold 20.6 million Shares, or approximately 30.6% of the Company's issued Shares. It will also have two nominees on the Board (Messrs Mota and Shaw). Furthermore, the ME Group will hold 18.75 million Performance Rights. Whilst these vest upon milestones being reached, they will only convert to Shares in circumstances that the ME Group either does not increase its voting power, or does so using the "3% creep"

exception to the prohibition in the Corporations Act to a person increasing their voting power over 20%. The maximum voting power Luso can acquire, assuming all convertible securities convert to Shares and no other Shares are issued, will be approximately 41.33%.

Whilst it will not be able to determine the vote at Board meetings or Shareholder meetings, the ME Group will by virtue of its shareholding have some ability to control the Company. The ME Group will have the right to appoint up to two board nominees to the board of the Company. For further information in relation to the ME Group's right to appoint board nominees please refer to Section 7.2.

To assist in managing the above implications, the Company appointed an experienced Chairman (Mr Lucas) and will comply with the requirements of the Corporations Act and the ASX Listing Rules with respect to dealings between the Company and the ME Group. Mr Lucas is chairman and a partner at the boutique law firm Allion Partners and, going forward, is considered by the Board to be independent. For further information in relation to Mr Lucas' interests in his capacity as chairman and partner of Allion Partners please refer to Section 8.8 For further information in relation to Luso, MEIML and the ME Group, please refer to Section 2.10.

(f) **Dilution**

The Company will have 25 million Performance Rights (18.75 million of which will be held by the ME Group through its wholly-owned subsidiary Luso) and 3 million Options on issue. In the event these securities convert to ordinary Shares and no other Shares are issued (an outcome the Directors consider unlikely given the nature of the Performance Right hurdles, including a decision to mine), Shareholders will be diluted by approximately 30%.

In the future, the Company may elect to issue Shares or engage in capital raisings to fund operations and growth, for investments or acquisitions that the Company may decide to undertake, to repay debt or for any other reason the Board may determine at the relevant time.

While the Company will be subject to the constraints of the ASX Listing Rules regarding the percentage of its capital that it is able to issue within a 12-month period (other than where exceptions apply), Shareholder interests may be diluted as a result of such issues of Shares or other securities.

(g) **Legal environment**

The legal systems in overseas countries may be less developed than more established countries and this could result in the following risks:

- (i) political difficulties in obtaining effective legal redress in the courts whether in respect of a breach of law or regulation or in an ownership dispute;
- (ii) a higher degree of discretion held by various government officials or agencies;
- (iii) the lack of political or administrative guidance on implementing applicable rules and regulations, particularly in relation to taxation and property rights;
- (iv) inconsistencies or conflicts between and within various laws, regulations, decrees, orders and resolutions;
- (v) relative inexperience of the judiciary and court in matters affecting the Company;
- (vi) delays in court proceedings and delivery of judgements; or
- (vii) difficulties in relation to availability of foreign currency and ability to externalise proceeds.

(h) **Sovereign risk**

Malawi is subject to differing legal and political systems, when compared with the systems in place in Australia.

Possible risks include, without limitation, changes in the terms of mining legislation, changes to royalty arrangements, changes to taxation rates and concessions and changes in the ability to enforce legal rights. Any of these factors may, in the future, adversely affect the financial performance of the Company and the market price of its Shares.

(i) **Exploration and operating costs**

The proposed exploration expenditure of the Company is based on certain assumptions with respect to the method and timing of exploration and feasibility work. By their nature, these estimates and assumptions are subject to significant uncertainties and, accordingly, the actual costs may materially differ from these estimates and assumptions. Accordingly, no assurance can be given that the cost estimates and the underlying assumptions will be realised in practice.

(j) **Future funding requirements and ability to access debt and equity markets**

The Company's capital requirements depend on numerous factors and the Company may require additional debt or equity financing in the future to maintain or grow its business in addition to funds raised under the Offer.

There can be no assurance that the Company will be able to secure additional capital from debt or equity financing on favourable terms or at all. The Company may also seek to raise funds through joint ventures, production sharing arrangements or other means.

If the Company is unable to raise additional capital if and when required, this could delay, suspend or reduce the scope of the Company's business operations (including scaling back exploration programs) and could have a material adverse effect on the Company's operating and financial performance.

Any additional equity financing may result in dilution for some or all Shareholders, and debt financing, if available, may involve restrictive covenants which limit operations and business strategy.

(k) **Unforeseen expenses**

The Company is not aware of any material expenses that may need to be incurred that have not been taken into account. However, if such unforeseen material expenses were subsequently incurred, the expenditure proposals of the Company may be adversely affected.

(l) **Title risks**

The Project in which the Company has an interest is subject to the relevant conditions applying to Malawi. Failure to comply with these conditions may render the Project or the License liable for forfeiture.

The License will be subject to application for renewal from time to time. Renewal of the term of the License is subject to applicable legislation. If the License is not renewed for any reason, the Company may suffer significant damage through loss of the opportunity to develop and discover any mineral resources on the Project.

(m) **Potential acquisitions**

As part of its business strategy, the Company may make acquisitions of, or significant investments in, other resource projects. Any such future transactions would be accompanied by the risks commonly encountered in making acquisitions of resource projects.

(n) **Contractual risks**

The ability of the Company to achieve its objectives will depend on the performance by the counterparties to any agreements that the Company may enter into. If any counterparty defaults in the performance of their obligations, it may be necessary for the Company to approach a court to seek a legal remedy. Legal action can be costly. Furthermore, certain contracts to which the Company is a party may be governed by laws of jurisdictions outside Australia. There is a risk that the Company may not be able to seek the legal redress that it could expect under Australian law and generally there can be no guarantee that a legal remedy will ultimately be granted on the appropriate terms.

The Company entered into a Drilling Contract with Mota-Engil Engenharia e Construção África, S.A. (**ME Africa**), a member of the ME Group, for the provision of drilling and related services. In the event that ME Africa cannot comply with the terms of the contract there may be delays associated with obtaining another supplier in Malawi that could result in additional costs and delays to the Company with a consequential impact on exploration timing and budgets. Furthermore, the Drilling Contract is governed by the laws applicable in Malawi and

there can be no certainty that, in the event of a dispute, an appropriate remedy can be sought or obtained in a timely manner. For further information please refer to Section 7.4.

The Company will also enter into the Services Agreement with ME Africa and CMA for the provision of certain mining services relating to the Project. Under the Services Agreement, ME Africa has a right to negotiate with the Company regarding contracts that the Company may wish to enter into in relation to the Project. For further information please refer to Section 7.3.

(o) **Health, safety and the environment**

The conduct of business in the resources sector involves a variety of risks to the health and safety of personnel and to the environment. If it is conceivable that an incident may occur which might negatively impact on the Company's business.

(p) **International operations**

International operations are subject to a number of risks, including:

- (i) potential difficulties in enforcing agreements and collecting receivables through foreign local systems;
- (ii) potential difficulties in protecting intellectual property;
- (iii) increases in costs for transportation and shipping; and
- (iv) restrictive governmental actions, such as imposition of trade quotas, tariffs and other taxes.

These factors (or others) could materially and adversely affect the Company's business, results of operations and financial condition.

(q) **Fluctuations in market price of the Shares**

The price at which the Shares trade on ASX following the Company's listing may be higher or lower than the Offer Price. There is no guarantee that the Shares will appreciate in value or maintain the same level as the Offer Price.

The price at which the Shares trade following the Company's listing on ASX could be subject to fluctuations and will be affected by a number of factors relevant to the Company's business and its overall performance and other external factors.

Some of the factors which may affect the price at which the Shares trade on ASX include fluctuations in the domestic and international market for listed stocks, general economic conditions, including interest rates, inflation rates, exchange rates, changes to government fiscal, monetary or regulatory policies, legislation or regulation, the nature of the markets in which the Company operates (including movements in mineral prices) and general operational and business risks.

(r) **Trading in Shares may not be liquid**

There is currently no public market on which the Shares may be sold.

There can be no assurance that an active market for the Shares will develop or continue following the Company's listing on ASX. There may be relatively few potential buyers or sellers of the Shares on the ASX at any time. This may increase the volatility of the market price of the Shares.

It may also affect the prevailing market price at which Shareholders are able to sell their Shares. Accordingly, Shareholders may receive a market price for their Shares that is less or more than the price that Shareholders paid to acquire their Shares.

(s) **Economic conditions and other global or national issues**

General economic conditions, laws relating to taxation, new legislation, trade barriers, movements in interest and inflation rates, currency exchange controls and rates, national and international political circumstances (including outbreaks in international hostilities, wars, terrorist acts, sabotage, subversive activities, security operations, labour unrest, civil disorder, and states of emergency), natural disasters (including fires, earthquakes and floods), and quarantine restrictions, epidemics and pandemics, may have an adverse effect on the



Company's operations and financial performance, including the Company's exploration, development and production activities, as well as on its ability to fund those activities.

General economic conditions may also affect the value of the Company and its market valuation regardless of its actual performance. Specifically, it should be noted that the current evolving conflict between Ukraine and Russia is impacting global macroeconomics and markets generally. The nature and extent of the effect of this conflict on the performance of the Company and the value of the Shares remains unknown.

The trading price of the Shares may be adversely affected in the short to medium term by the economic uncertainty caused by the conflict between Ukraine and Russia and overall impacts on global macroeconomics. Given the situation is continually evolving, the outcomes and consequences are inevitably uncertain.

(t) **COVID-19**

Coronavirus disease (SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2), coronavirus disease 2019 or COVID 19, including any future resurgence or evolutions or mutations thereof or any related or associated epidemic, pandemic or disease outbreak) (**COVID-19**) is continuing to impact global economic markets.

The nature and extent of the effect of COVID-19 on the performance of the Company remains unknown. The market price of Shares may be adversely affected in the short to medium term by the economic uncertainty caused by COVID-19.

Further, any governmental or industry measures taken in response to COVID-19 may adversely impact the Company's operations and are likely to be beyond the control of the Company. In addition, the effects of COVID-19 on the market price of the Shares and global financial markets generally may also affect the Company's ability to raise equity or debt if and when required or require the Company to issue capital at a discount, which may result in dilution for some or all Shareholders.

(u) **Market conditions**

Share market conditions may affect the value of the Shares regardless of the Company's operating performance. Share market conditions are affected by many factors such as:

- (i) general economic outlook.
- (ii) introduction of tax reform or other new legislation;
- (iii) interest rates and inflation rates;
- (iv) global health epidemics or pandemics;
- (v) currency fluctuations;
- (vi) changes in investor sentiment toward particular market sectors;
- (vii) the demand for, and supply of, capital;
- (viii) political tensions; and
- (ix) terrorism or other hostilities.

The market price of securities can fall as well as rise and may be subject to varied and unpredictable influences on the market for equities in general and resource exploration stocks in particular.

Neither the Company nor the Directors warrant the future performance of the Company or any return on an investment in the Company.

Prospective investors should be aware that there are risks associated with any securities investment. Securities listed on a stock market, and in particular securities of exploration companies, experience extreme price and volume fluctuations that have often been unrelated to the operating performance of such companies.

These factors may materially affect the market price of the Shares regardless of the Company's performance. In addition, after the end of the relevant restriction arrangements applying to certain Securities, a significant sale of then tradeable Shares (or the market

perception that such a sale might occur) could have an adverse effect on the market price of the Shares.

### **6.3 General investment risks**

(a) **Reliance on key personnel**

The responsibility of overseeing the day-to-day operations and the strategic management of the Company depends substantially on its senior management and its key personnel.

There can be no assurance given that there will be no detrimental impact on the Company if one or more of the Company's senior management and key personnel terminated service with the Company.

The Company may not be able to replace its senior management or key personnel with persons of equivalent expertise and experience within a reasonable period of time or at all and the Company may incur additional expenses to recruit, train and retain personnel.

Loss of such personnel may also have an adverse effect on the performance of the Company.

(b) **Competition risk**

The industry in which the Company will be involved is subject to domestic and global competition. Although the Company will undertake all reasonable due diligence in its business decisions and operations, the Company will have no influence or control over the activities or actions of its competitors, which activities or actions may, positively or negatively, affect the operating and financial performance of the Company's projects and business.

(c) **Commodity price volatility and exchange rate risks**

If the Company achieves success leading to mineral production, the revenue it will derive through the sale of product exposes the potential income of the Company to commodity price and exchange rate risks.

Commodity prices fluctuate and are affected by many factors beyond the control of the Company.

Such factors include supply and demand fluctuations for precious and base metals, technological advancements, forward selling activities and other macro-economic factors. Furthermore, international prices of various commodities are denominated in United States dollars, whereas the income and expenditure of the Company will be taken into account in Australian currency, exposing the Company to the fluctuations and volatility of the rate of exchange between the United States dollar and the Australian dollar as determined in international markets.

(d) **Government policy changes**

Adverse changes in government policies or legislation that affect ownership of mineral interests, taxation, royalties, land access, native title, environmental protection, carbon emissions, labour and mining, could have an adverse impact on the Company's operations.

It is possible that the current system of exploration and mine permitting in Malawi (and other jurisdictions in which the Company may acquire projects and operate) may change, resulting in impairment of rights and possibly expropriation of the Company's properties without adequate compensation.

(e) **Insurance**

The Company intends to insure its operations in accordance with industry practice. However, in certain circumstances the Company's insurance may not be of a nature or level to provide adequate insurance cover.

The occurrence of an event that is not covered or fully covered by insurance could have a material adverse effect on the business, financial condition and results of the Company. Insurance of all risks associated with mineral exploration and production is not always available and where available the costs can be prohibitive.

(f) **Unforeseen expenditure risk**

The Company may be subject to significant unforeseen expenses or actions, which may include unplanned operating expenses, future legal actions or expenses in relation to future unforeseen events.

The Directors expect that the Company will have adequate working capital to carry out its stated objectives however, there is the risk that additional funds may be required to fund the Company's future objectives.

(g) **Force Majeure**

The Company's existing Project or projects acquired in the future may be adversely affected by risks outside the control of the Company including labour unrest, civil disorder, political hostilities, war, subversive activities or sabotage, fires, floods, explosions or other catastrophes, epidemics, pandemics or quarantine restrictions.

(h) **Taxation and Taxation Changes**

Taxation law is complex and frequently changing, both prospectively and retrospectively. Changes in taxation laws (including employment tax, GST, stamp duty and the ability to claim offsets) and changes in the way taxation laws are interpreted or administered, create a degree of uncertainty and may impact the tax liabilities or future financial results of the Company. In particular, both the level and basis of taxation may change.

An investment in the Shares involves tax considerations which may differ for each Shareholder. Each prospective investor is encouraged to seek professional taxation and financial advice in connection with any investment in the Company and the consequences of acquiring and disposing of Shares.

(i) **Litigation and other proceedings**

The Company is exposed to potential legal and other claims or disputes in the course of its business, including (without limitation) native title claims, tenure disputes, environmental claims, occupational health and safety claims and employee claims. Further, the Company may be involved in disputes with other parties in the future which may result in litigation. Any costs involved in defending or settling legal and other claims or disputes that may arise, or where a claim or dispute is proven, could be costly and may impact adversely on the Company's operations, financial performance and financial position and/or cause damage to its reputation.

(j) **Investment speculative**

The risk factors described above, and other risk factors not specifically referred to, may have a materially adverse impact on the performance of the Company and the value of the Shares. Prospective investors should consider that an investment in the Company is highly speculative.

The Shares offered under this Prospectus carry no guarantee in respect of profitability, dividends, return of capital or the price at which they may trade on the ASX.

Before deciding whether to subscribe for Shares under this Prospectus you should read this Prospectus in its entirety and consider all factors, taking into account your objectives, financial situation and needs.

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## 7. MATERIAL CONTRACTS

### 7.1 Introduction

Set out below are summaries of the key provisions of contracts to which the Company is a party which are, or may be, material in terms of the Offer or the operations of the Company or otherwise are or may be relevant to an investor who is contemplating the Offer. To understand fully all rights and obligations pertaining to the material contracts, it would be necessary to read them in full.

### 7.2 Share Sale Agreement

On or about 4 April 2023 the Company entered into a share sale agreement (**Share Sale Agreement**) with Luso and MEIML to acquire 100% of the issued share capital in CMA, an entity that is incorporated in Malawi, which will hold the Tenements that comprise the Project (**Acquisition**).

The key terms of the Share Sale Agreement are summarised below:

- (a) (**Share Sale**) Luso agrees to sell, and the Company agrees to buy, 100% of the shares in CMA (**Sale Shares**), free of any encumbrances in exchange for the Company issuing to Luso 18,750,000 Performance Rights and 19,000,000 Shares (**Consideration Securities**).
- (b) (**Conditions**) The Share Sale Agreement is subject to the following conditions precedent:
  - (i) Luso obtaining a written notice from the Foreign Investment Review Board that the Commonwealth Government does not object to the Acquisition;
  - (ii) the Company completing its initial public offering and raising at least \$8,000,000 in subscription monies pursuant to the Offer;
  - (iii) the Company receiving conditional approval from the ASX for admission to the Official List of the ASX;
  - (iv) the Company satisfying all conditions stipulated in ASX's conditional approval letter so that admission to the Official List of the ASX becomes unconditional;
  - (v) MEIML having transferred all right, title and interest in the Tenements to CMA;
  - (vi) MEIML having obtained all authorisations and regulatory approvals to permit the transfer of the Tenements and the Sale Shares;
  - (vii) CMA having been duly incorporated in Malawi and evidence of its incorporation having been provided to the Company; and
  - (viii) the Services Agreement having been duly executed by ME Africa, CMA and the Company.
- (c) (**Unwinding the Acquisition**) If the Shares subscribed for under the Company's initial public offering are not issued to investors within 5 business days of completion under the Share Sale Agreement, Luso may request that the Company transfers the Sale Shares back to Luso. Following such a request the Company must transfer the Sale Shares back to Luso for the following consideration:
  - (i) the payment of \$1.00 cash by Luso to the Company; and
  - (ii) the right of the Company to require Luso to agree to the buy back of the Consideration Securities by the Company (subject to the Company complying with all applicable laws).
- (d) (**Minimum Exploration Amount**) During the two years following admission to the Official List of the ASX, the Company agrees to spend a minimum of \$4,500,000 on exploration activities on the Project (**Minimum Exploration Amount**) and, once commenced, the Company may propose amendments to the amount or the timeframe in which it is to be expended, such proposals to be considered by Luso (acting reasonably).

- (e) **(Board nomination right)** Subject to completion occurring under the Share Sale Agreement, Luso will have the right to nominate up to two Directors for appointment to the board of the Company in the following circumstances:
- (i) one director – where Luso holds Relevant Interests in between 10% and 20% of the Shares in the Company.
  - (ii) two directors – where Luso holds Relevant Interests in at least 20% of the Shares in the Company; and
  - (iii) two directors – in the period commencing from completion of the Share Sale Agreement and ending on the later to occur of:
    - (A) two years from the Company being admitted to the Official List of the ASX; and
    - (B) and the date on which the Company has satisfied the Minimum Exploration Amount,(regardless of shareholding).

Subject to section 7.2(e)(iii) above, Luso will not be entitled to nominate a director to the board of the Company where it holds Relevant Interests in less than 10% of the Shares in the Company and it will lose all board nomination rights after five years from the date the Company is admitted to the Official List of the ASX if it holds Relevant Interests in less than 10% of the Shares in the Company for a period of not less than 60 consecutive Business Days.

- (f) **(Re-election of board nominees)** If Luso's board nominee under Section 7.2(e) above is removed (including by shareholder vote or disqualification), Luso retains the right to appoint a replacement board nominee.
- (g) **(CMA board nominees)** Luso has the right to nominate the same number of directors to the board of CMA as it does to the board of the Company under Section 7.2(e) above. The directors appointed to the board of CMA do not need to be the same persons as the Directors appointed to the board of the Company.
- (h) **(Conflict of interest and compliance with law)** Where Luso has the right to appoint a board nominee to the board of the Company, the board nominee:
- (i) subject to Section 7.2(h)(ii), may have regard to and represent the interests of the ME Group and act in accordance with the wishes of the ME Group;
  - (ii) will be responsible for managing their individual conflicts of interest and compliance with their statutory and fiduciary obligations; and
  - (iii) subject to Section 7.2(h)(ii) above, will only be excluded from participating in discussions at a board meeting on a matter, or voting on a matter, where that exclusion is required by applicable law including in accordance with section 195 of the Corporations Act.
- (i) **(Escrow)** Luso acknowledges that the Consideration Securities will be subject to an escrow period of 2 years from the date the Company is admitted to the Official List of the ASX and has voluntarily agreed to a further escrow period of 12 months in relation to 50% of the Consideration Securities.
- (j) **(Release and Indemnity)** The Company agrees that it will not make, and releases Luso against any claim by the Company against Luso under:
- (i) Part 7.10 (including section 1041H) of the Corporations Act;
  - (ii) Part 2 Division 2 of the *Australian Securities and Investments Commission Act 2001* (Cth);
  - (iii) the Australian Consumer Law; or
  - (iv) any corresponding provision of any Australian State or Territory legislation, or on a similar provision under any other law,

for any act or omission or for any statement or representation under or in respect of the Share Sale Agreement or otherwise **(Release)**.

The Company indemnifies Luso against any loss which may be suffered or incurred by Luso in respect of a claim brought by the Company which is inconsistent with the Release.

- (k) **(Maximum liability)** The maximum liability of Luso to the Company for all claims for breach of a warranty under the Share Sale Agreement is \$3,800,000.
- (l) **(Termination)** Luso or the Company may terminate the Share Sale Agreement prior to completion if the other party commits a material breach and fails to rectify the breach within 15 Business Days of a request by the other party to do so.
- (m) **(Assignment)** MEIML, Luso and the Company cannot assign or novate the Share Sale Agreement without the prior written consent of each other party (such consent cannot be unreasonably withheld).
- (n) **(Governing law)** The law of Western Australia governs the Share Sale Agreement.
- (o) **(Other)** The Share Sale Agreement contains other terms, including warranties, that are standard for agreements of this nature.

The Directors, other than Messrs Mota and Shaw considered the terms of the Share Sale Agreement to be reasonable in the circumstances as if the Company and Luso were dealing at arm's length so that Shareholder approval was not required under Chapter 2E of the Corporations Act.

### 7.3 Services Agreement

On completion under the Share Sale Agreement, the Company will enter into a services agreement with Mota-Engil Engenharia e Construção África, S.A. (**ME Africa**) and CMA pursuant to which ME Africa will carry out exploration and mining development services in relation to the Project (**Services Agreement**). The key terms of the Services Agreement are summarised below:

- (a) **(Engagement)** The Company has engaged ME Africa on a non-exclusive basis to provide the Services as an independent contractor.
- (b) **(Term)** The term of the Services Agreement is ongoing unless terminated by the parties in accordance with Section 7.3(h) below. The term of the Services to be provided under Sections 7.3(c)(i) and 7.3(c)(ii) below is for six months (or such longer term as agreed by the parties), commencing on the date that the Company is admitted to the Official List of the ASX (**Effective Date**).
- (c) **(Services)** ME Africa will provide the following services to the Company:
  - (i) staff to work on the Project, including one project geologist, one technical supervisor and two local geologists (**Secondees**);
  - (ii) provision of office space at ME Africa's office in Malawi for the Secondees to use while they are working on the Project; and
  - (iii) any additional services agreed between the parties in writing.
- (d) **(Fee)** The Company will pay ME Africa a monthly fee per Secondee. The Fee is US\$10,000 per month for each project geologist and technical supervisor and US\$5,000 per month for each local geologist. The Fee will be invoiced monthly and will be payable within 14 days.
- (e) **(Services prior to Effective Date)** The Company has also agreed to pay ME Africa fees for any Services provided prior to the Effective Date. If the Effective Date occurs on or before 31 May 2023, this fee is capped at a total of US\$200,000. Thereafter, the fee of US\$200,000 is payable plus US\$30,000 per calendar month until the Effective Date.
- (f) **(Offer of Employment)** Prior to expiry of the Term, the Company (acting reasonably) will make an offer of direct employment to the project geologist and either of the local geologists that have been Secondees on the Project.
- (g) **(Contracting Right)** ME Africa has a right to negotiate with the Company regarding contracts (**Proposed Contracts**) that the Company may wish to enter into in relation to the Project when a Proposed Contract is valued above US\$500,000 and the ME Group, in aggregate, continues to hold Relevant Interests in at least 15% of the Shares in the Company. Once the Company provides notice to ME Africa regarding the Proposed Contract, ME Africa has:
  - (i) 15 Business Days in which to consider exercising the Contracting Right; and

- (ii) 60 Business Days in which to negotiate the terms of any Proposed Contract following the exercise of the Contracting Right,
- with any dispute between the parties over the terms of any Proposed Contract to be determined by an independent expert.
- (h) **(Termination)** The parties may terminate the Services Agreement by giving notice to the other party, if the other party:
    - (i) fails to remedy a material default under the Agreement within 14 days of a request in writing to do so; or
    - (ii) has a liquidator, administrator or receiver appointed to it.
  - (i) **(Limitation of Liability)** ME Africa is not liable for:
    - (i) any act or omission of the Secondedes during the Term, including any liability arising by virtue of the negligence of the Secondedes;
    - (ii) any liabilities to the Company for any indirect loss arising from a breach of contract, tort or statute; and
    - (iii) any such other losses or damages arising out of the Services Agreement (whether in contract, tort or statute).
  - (j) **(Assignment)** None of the parties can assign their rights under the Services Agreement unless agreed by the other parties in writing. No obligation under the Services Agreement can be assigned to a third party without the prior written consent of the other parties.
  - (k) **(No agency)** The Services Agreement does not create a relationship of agency or employment between the parties.
  - (l) **(Other)** The Services Agreement contains other terms, including general covenants, that are standard for agreements of this nature.

The Directors, other than Messrs Mota and Shaw considered the terms of the Services Agreement to be reasonable in the circumstances as if the Company and Luso were dealing at arm's length so that Shareholder approval was not required under Chapter 2E of the Corporations Act.

## 7.4 Drilling Contract

As part of the Company's intended exploration program (please see Section 3.3(f) and Section 3.4) the Company intends to conduct an extensive drilling program on the Project.

On or about 29 March 2023 the Company entered into an agreement with Mota-Engil Engenharia e Construção África, S.A. (**ME Africa**) to carry out a sonic drilling exploration program at the Project (**Drilling Contract**) in accordance with a proposal submitted by ME Africa to the Company in December 2022. The key terms of the Drilling Contract are summarised below:

- (a) **(Work Program)** The Company has engaged ME Africa to undertake an estimated minimum of 17,250m of sampling at the Project, which is to be carried out by sonic drilling.
- (b) **(Fee)** The Company will pay ME Africa a fee of approximately €1,032,952.50 or equivalent in US dollars for performing the Work Program. 30% of the Fee will be payable by the Company in advance (**Deposit**). Remaining payments will be made as the Work Program progresses following receipt of an invoice from ME Africa.
- (c) **(Timing)** ME Africa is to commence the Work Program (for a period of up to 12 months) following a one-week mobilisation period that will begin once the Deposit has been paid and the Company is admitted to the Official List.
- (d) **(Exclusions)** The Fee does not include costs associated with the following:
  - (i) authorisations or licences for work development;
  - (ii) clearing, deforestation or removal of obstacles to permit boreholes to be developed;
  - (iii) indemnity of local communities to due to destruction of local fields and crops;
  - (iv) removal and transportation of drilling spoils from the Project;
  - (v) drainage of rainwater or underground water;

- (vi) tax;
  - (vii) other works or activities not included in the Work Program; and
  - (viii) all consumables associated with the collection, storage and shipment of samples;
  - (ix) PVC or steel casing, drilling mud, cement, foam, sealants and drill hole caps.
- (e) **(Maintenance of Equipment)** ME Africa will be responsible for maintaining the drilling equipment in safe and good working order.
  - (f) **(Governing law)** The laws applicable in Malawi govern the Drilling Contract. Any disputes which cannot be resolved by the parties within 30 days will be referred to the Judicial Court of the Province of Lilongwe.
  - (g) **(Other)** The Drilling Contract contains other terms, which are standard for agreements of this nature.

ME Africa is a related party of MEIML and the ME Group. On the listing of the Company, the ME Group will hold 30.6% of the Shares and a further 18.75 million Performance Rights. Please see Section 2.10 for further information.

The Directors, other than Messrs Mota and Shaw considered the terms of the Drilling Contract to be reasonable in the circumstances as if the Company and ME Africa were dealing at arm's length so that Shareholder approval was not required under Chapter 2E of the Corporations Act.

## 7.5 Lead Manager Mandate

On 1 September 2022, the Company entered into a lead manager mandate (**Mandate**) with Sequoia Corporate Finance Pty Ltd (**Lead Manager**), which has agreed to manage the Offer on certain terms and conditions which are summarised below:

- (a) **(Term)** The Mandate commenced on 1 September 2022 and continues for an initial 12-month term, following which the Mandate will continue on month-to-month unless and until it is terminated in accordance with its terms.
- (b) **(Remuneration)** The Company will pay the Lead Manager Fees, consisting of:
  - (i) for managing and arranging funds via an equity financing through the offer of shares or other securities to assist the Company's IPO funding requirements, subject to (iii) below, a fee of 6% (plus GST) of all funds raised from all sources;
  - (ii) where funds committed are a direct result of a pre-existing relationship with the Company (i.e. Chairman's List), a fee of 2% (plus GST) of all funds raised is payable; and
  - (iii) 3 million unquoted Options as follows:
    - (A) 1 million unquoted Options exercisable at \$0.25 each (being a 25% premium to the Offer price);
    - (B) 1 million unquoted Options exercisable at \$0.30 each (being a 50% premium to the Offer price); and
    - (C) 1 million unquoted Options exercisable at \$0.40 each (being a 100% premium to the Offer price),
 each expiring 4 years from the date of issue.

The Options are otherwise on the terms set out in Section 8.3 below.

- (c) **(Exclusions)** The Mandate does not constitute any agreement on the part of the Lead Manager to provide taxation, actuarial, accounting or technical advice or underwrite or subscribe for securities under the Offer.
- (d) **(Exclusivity)** During the Term of the Mandate, the Company has agreed to engage the Lead Manager on an exclusive basis.
- (e) **(Introduced party fees)** If, following expiry or termination of the Mandate, the Company cancels and/or re-initiates an initial public offering, it will pay the Lead Manager a fee for any agreement it enters into with a party introduced to it by the Lead Manager.



- (f) **(Indemnity)** The Company has agreed, subject to certain carve outs, to indemnify the Lead Manager, its related bodies corporate and its respective current and former officers, employees and contractors against:
  - (i) all losses, claims, actions, demands, proceedings or liabilities of any nature which arise out of or in connection with the Mandate, the Offer or any breach of the Mandate; and
  - (ii) all legal expenses (on a full indemnity basis) incurred in connection with any investigation or defence of any proceeding which is as a result of wilful misconduct, fraud or negligence on the part of the Company or a material breach of the Mandate by the Company.
- (g) **(Ongoing services)** In the 12 months following completion the listing of the Company on the Official List of the ASX, the Lead Manager will:
  - (i) continue to act as the Company's exclusive financial advisor and assist with any further capital raising or project finance in that period; and
  - (ii) assist the Company, through its wholly owned subsidiary Corporate Connect Pty Ltd, with continuing research. Corporate Connect Pty Ltd will charge the Company a monthly fee of \$5,000 (plus GST) for this service.
- (h) **(Assignment)** Neither party can assign its rights under the Mandate without the prior consent of the other.
- (i) **(Other)** The Mandate contains other terms, which are standard for agreements of this nature.

## 7.6 Long Term Incentive Plan

The Directors have adopted a long term incentive plan (**LTIP**), to enable eligible persons to be granted options and/or Performance Rights (**Awards**), the principal terms of which are summarised below.

The maximum number of equity securities that can be issued under the LTIP is 3.5 million, excluding Awards detailed in this Prospectus and any Award that would otherwise require the approval of Shareholders. The Company will seek Shareholder approval should it wish to issue equity securities under the LTIP in excess of this.

- (a) **(Eligibility)** The Board may, in its absolute discretion, invite an "Eligible Person" to participate in the LTIP. An "Eligible Person" means a person that is a "primary participant" (as that term is defined in Division 1A of Part 7.12 of the Corporations Act) in relation to the Company or an associated body corporate and has been determined by the Board to be eligible to participate in the LTIP from time to time.
- (b) **(Issue Cap)** Unless the Company is unlisted or the Company constitution provides otherwise, the Company must not make an offer of Awards for monetary consideration under the LTIP, where the total number of Shares to be issued under the LTIP (**LTIP Shares**) (or that will be issued upon conversion of convertible securities to be issued), when aggregated with the number of LTIP Shares that may be issued as a result of offers made under the LTIP, at any time during the previous 3 year period, would exceed 5% of the total number of Shares on issue at the date of the offer.
- (c) **(Disclosure)** All offers of Awards under the LTIP for no monetary consideration are made pursuant to Division 1A of Part 7.12 of the Corporations Act and accordingly the Company will not issue a disclosure document for such an offer.  
  
If the Company makes an offer to issue Awards under the LTIP for monetary consideration, the Company will comply with the disclosure requirements in Division 1A of Part 7.12 of the Corporations Act.
- (d) **(Nature of Awards)** Each Option or Performance Right entitles the participant holding the option or Performance Right, to subscribe for, or be transferred, one Share. Any Share acquired pursuant to the exercise of an Award will rank equally with all existing Shares from the date of acquisition.
- (e) **(Vesting)** Awards may be subject to exercise conditions, performance hurdles or vesting conditions (**Conditions**). These Conditions must be specified in the Offer Letter to Eligible Persons. In the event that a takeover bid for the Company is declared unconditional, there is

a change of control in the Company, or if a merger by way of a scheme of arrangement has been approved by a court, then the Board may determine that:

- (i) all or a percentage of unvested Options will vest and become exercisable;
  - (ii) all or a percentage of Performance Rights will be automatically exercised; and
  - (iii) any Shares issued or transferred to a participant under the LTIP that have restrictions (on their disposal, the granting of any security interests in or over, or otherwise on dealing with), will be free from any restrictions on disposal.
- (f) **(Exercise Period)** The period during which a vested Award may be exercised will commence when all Conditions have been satisfied, waived by the Board, or are deemed to have been satisfied under the rules of the LTIP and the Company has issued a Vesting Notification to the participant, and ends on the Expiry Date (as defined at 7.6(i)(iv) below).
- (g) **(Disposal restrictions)** Awards granted under the LTIP may not be assigned, transferred, novated, encumbered with a security interest (such as a mortgage, charge, pledge, lien, encumbrance or other third party interest of any nature) over them, or otherwise disposed of by a participant, other than to a nominated party (such as an immediate family member, trustee of a trust or company) in accordance with the LTIP, unless:
- (i) the prior consent of the Board is obtained; or
  - (ii) such assignment or transfer occurs by force of law upon the death of a participant to the participant's legal personal representative.
- (h) **(Cashless exercise)** Participants may, at their election, elect to pay the exercise price for an Option by setting off the exercise price against the number of Shares which they are entitled to receive upon exercise of the Option (**Cashless Exercise Facility**). By using the Cashless Exercise Facility, the participant will receive Shares to the value of the surplus after the exercise price has been set off.
- If a participant elects to use the Cashless Exercise Facility, the participant will only be issued that number of Shares (rounded down to the nearest whole number) as are equal to the value of the difference between the exercise price otherwise payable for the Options and the then market value of the Shares at the time of exercise (determined as the volume weighted average price on the ASX over the five trading days prior to providing a notice of exercise).
- (i) **(Lapse)** Unvested Awards will generally lapse on the earlier of:
- (i) the cessation of employment, engagement or office of a relevant person;
  - (ii) the day the Board makes a determination that all unvested Awards and vested options of the relevant person will lapse because, in the opinion of the Board a relevant person has acted fraudulently or dishonestly, or is in material breach of his or her duties or obligations to the Company;
  - (iii) if any applicable Conditions are not achieved by the relevant time;
  - (iv) if the Board determines that any applicable Conditions have not been met and cannot be met prior to the date that is 5 years from the grant date of an Award or any other date determined by the Board and as specified in the Offer (Expiry Date); or
  - (v) the Expiry Date.

Where a participant ceases to be employed or engaged by the Company and is not a "Bad Leaver" (as that term is defined in the LTIP), and the Awards have vested, they will remain exercisable until the Awards lapse in accordance with the LTIP rules or if they have not vested, the Board will determine as soon as reasonably practicable after the date the participant ceases to be employed or engaged, how many (if any) of those participant's Awards will be deemed to have vested and exercisable.

Where a participant becomes a "Bad Leaver" (as that term is defined in the LTIP), all Awards, unvested or vested, will lapse on the date of the cessation of employment, engagement or office of that participant.

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## 8. ADDITIONAL INFORMATION

### 8.1 Litigation

As at the date of this Prospectus, the Company is not involved in any legal proceedings and the Directors are not aware of any legal proceedings pending or threatened against our Company.

### 8.2 Rights attaching to Shares

The following is a summary of the more significant rights attaching to Shares under the Constitution. This summary is not exhaustive and does not constitute a definitive statement of the rights and liabilities of Shareholders. To obtain such a statement, persons should seek independent legal advice.

Full details of the rights attaching to Shares are set out in the Constitution, which is available for review by Shareholders at the Company's website [www.chilwaminerals.com.au](http://www.chilwaminerals.com.au) and at the office of the Company during normal business hours. A copy of the Constitution can also be sent to Shareholders upon request to the Company Secretary, John Lewis, who can be contacted on [cosec@chilwaminerals.com.au](mailto:cosec@chilwaminerals.com.au).

- (a) **(General Meeting)** Each member is entitled to receive notice of, and to attend and vote at, general meetings of the Company and to receive all notices, accounts and other documents required to be sent to members under the Company's Constitution, the Corporations Act or the ASX Listing Rules.
- (b) **(Voting)** Subject to any rights or restrictions for the time being attached to any class or classes of shares whether by the terms of their issue, the Constitution, the Corporations Act or the ASX Listing Rules, at a general meeting of the Company every holder of fully paid ordinary shares present in person or by a representative, proxy or attorney has one vote on a show of hands and every such holder present in person or by a representative, proxy or attorney has one vote per Share on a poll. A person who holds an ordinary Share which is not fully paid up is entitled, on a poll, to a fraction of a vote equal to the proportion which the amount paid bears to the total issue price of the share. A member is not entitled to vote unless all calls and other sums presently payable by the member in respect of shares in the Company have been paid. Where there are two or more joint holders of the Share and more than one of them is present at a meeting and tenders a vote in respect of the Share (whether in person or by proxy or attorney), the Company will count only the vote cast by the member whose name appears before the other(s) in the Company's register of members.
- (c) **(Issues of Further Shares)** The Directors may, on behalf of the Company, issue, grant options over or otherwise dispose of unissued shares to any person on the terms, with the rights, and at the times that the Directors decide. However, the Directors must act in accordance with the restrictions imposed by the Company's Constitution, the ASX Listing Rules, the Corporations Act and any rights for the time being attached to the shares in special classes of shares.
- (d) **(Variation of Rights)** At present, the Company has on issue one class of shares only, namely ordinary shares. The rights attached to the shares in any class may be altered only by a special resolution of the Company and a special resolution passed at a separate meeting of the holders of the issued shares of the affected class, or with the written consent of the holders of at least three quarters of the issued shares of the affected class.
- (e) **(Transfer of Shares)** Subject to the Company's Constitution, the Corporations Act, the ASX Settlement Operating Rules and the ASX Listing Rules, ordinary shares are freely transferable. The shares may be transferred by a proper transfer effected in accordance with ASX Settlement Operating Rules, by any other method of transferring or dealing introduced by ASX and as otherwise permitted by the Corporations Act or by a written instrument of transfer in any usual form or in any other form approved by the Directors that is permitted by the Corporations Act.

The Company may decline to register a transfer of shares in the circumstances described in the Company's Constitution and where permitted to do so under the ASX Listing Rules. If the Company declines to register a transfer, the Company must give the lodging party written notice of the refusal and the reasons for refusal. The Directors must decline to register a transfer of shares when required by law, by the ASX Listing Rules or by the ASX Settlement Operating Rules.

- (f) **(Partly Paid Shares)** The Directors may, subject to compliance with the Company's Constitution, the Corporations Act and the ASX Listing Rules, issue partly paid shares upon which amounts are or may become payable at a future time(s) in satisfaction of all or part of the unpaid issue price.
- (g) **(Dividends)** Subject to the Corporations Act, the ASX Listing Rules, the Company's Constitution and the rights of any person entitled to shares with special rights to dividend, the Directors may determine that a dividend is payable. The Company in general meeting may declare a dividend if the Directors have recommended a dividend and a dividend shall not exceed the amount recommended by the Directors. The Directors may authorise the payment to the members of such interim dividends as appear to the Directors to be justified by the Company's profits and for that purpose may declare such interim dividends. Subject to the rights of members entitled to shares with special rights as to dividend (if any), all dividends in respect of shares (including ordinary shares) are to be declared and paid proportionally to the amount paid up or credited as paid up on the shares.
- (h) **(Winding Up)** Subject to the rights of holders of shares with special rights in a winding up, if the Company is wound up, members (including holders of ordinary shares) will be entitled to participate in any surplus assets of the Company in proportion to the shares held by them respectively irrespective of the amount paid up or credited as paid up on the shares.
- (i) **(Dividend Plans)** The Directors may establish and maintain dividend plans under which (among other things) a member may elect that dividends payable by the Company be reinvested by way of subscription for shares in the Company or a member may elect to forego any dividends that may be payable on all or some of the shares held by that member and to receive instead some other entitlement, including the issue of shares.
- (j) **(Directors)** The Company's Constitution states that the minimum number of Directors is three.
- (k) **(Powers of the Board)** The Directors have power to manage the business of the Company and may exercise that power to the exclusion of the members, except as otherwise required by the Corporations Act, any other law, the ASX Listing Rules or the Company's Constitution.

### 8.3 Rights attaching to Options

The Options to be issued to the Lead Manager (see Section 7.5) are on the terms summarised below.

- (a) **(Entitlement):** Subject to the terms and conditions set out below, each Option, once vested, entitles the holder to subscribe for one Share of the Company upon exercise of the Option.
- (b) **(Exercise Price and Expiry Date):** The 3,000,000 Options to be issued to the Lead Manager will be issued in part consideration for acting as lead manager to the Offer and are exercisable as follows:
  - (i) 1,000,000 Options at \$0.25;
  - (ii) 1,000,000 Options at \$0.30; and
  - (iii) 1,000,000 Options at \$0.40 each,**(Exercise Price)** and expire the date that is 4 years after the date that the Company is admitted to the Official List of the ASX (**Expiry Date**). An Option not exercised before the Expiry Date will automatically lapse on the Expiry Date.
- (c) **(Exercise Period):** Vested Options are exercisable at any time on or prior to the Expiry Date.
- (d) **(Quotation of the Options):** The Company will not apply for quotation of the Options on ASX.
- (e) **(Transferability of the Options):** The Options may not be assigned, transferred, novated, or encumbered with a security interest, other than with prior approval from the Board acting in its sole and absolute discretion, subject to any restriction or escrow arrangements imposed by ASX or under applicable Australian securities laws.
- (f) **(Notice of Exercise):** The Options may be exercised by notice in writing to the Company in the manner specified on the Option certificate (**Notice of Exercise**) and payment of the Exercise Price for each Option being exercised in Australian currency by electronic funds transfer or other means of payment acceptable to the Company. Any Notice of Exercise of an

Option received by the Company will be deemed to be a notice of the exercise of that Option as at the date of receipt.

Cheques shall be in Australian currency made payable to the Company and crossed "Not Negotiable". The application for Shares on exercise of the Options with the appropriate remittance should be lodged at the Company's registry.

- (g) **(Shares issued on exercise):** Shares issued on exercise of the Options rank equally with the then Shares of the Company.
- (h) **(Quotation of Shares on exercise):** If admitted to the official list of ASX at the time, application will be made by the Company to ASX for quotation of the Shares issued upon the exercise of the Options.
- (i) **(Timing of issue of Shares):** Within 30 Business Days after the later of the following:
  - (i) receipt of a Notice of Exercise given in accordance with these terms and conditions and payment of the Exercise Price for each Option being exercised; and
  - (ii) when excluded information in respect to the Company (as defined in section 708A(7) of the Corporations Act) (if any) ceases to be excluded information,the Company will:
  - (i) issue the Shares pursuant to the exercise of the Options;
  - (ii) give ASX a notice that complies with section 708A(5)(e) of the Corporations Act or, if the Company is unable to issue such a notice, lodge with ASIC a prospectus prepared in accordance with the Corporations Act and do all such things necessary to satisfy section 708A(11) of the Corporations Act to ensure that an offer for sale of the Shares does not require disclosure to investors; and
  - (iii) apply for official quotation on ASX of Shares issued pursuant to the exercise of the Options.
- (j) **(Reconstruction of capital):** If at any time the issued capital of the Company is reconstructed, all rights of an Option holder are to be changed in a manner consistent with the Corporations Act and the ASX Listing Rules at the time of the reconstruction.
- (k) **(Participation in new issues):** There are no participation rights or entitlements inherent in the Options and holders will not be entitled to participate in new issues of capital offered to Shareholders during the currency of the Options without exercising the Options.
- (l) **(Change in exercise price):** An Option does not confer the right to a change in Exercise Price or a change in the number of underlying securities over which the Option can be exercised.

#### 8.4 Rights attaching to Performance Rights

The Performance Rights will be subject to the following vesting criteria and issued on the terms summarised below:

(a) **Definitions**

Words with capitalized letters in this section have the following meaning, unless the context requires otherwise:

**Holder** means a holder of a Performance Right.

**Shares** means fully paid ordinary shares in the capital of the Company.

**Class A Performance Hurdle** means the Company announcing a JORC compliant Indicated Resource of 3 million tonnes THM from the Project by no later than 24 months from the grant of the performance right.

**Class B Performance Hurdle** means the Company announcing the completion of a Pre-Feasibility Study (as defined in the JORC Code) that recommends further proceeding with the Project by no later than 48 months from the grant of the performance rights.

**Class C Performance Hurdle** means the Company announcing the completion of a Feasibility Study (as defined in the JORC Code) that recommends further

proceeding with the Project by no later than 48 months from the grant of the performance rights.

**Class D Performance Hurdle** means the Company announcing that a decision to mine the Project has been made by no later than 60 months from the grant of the performance rights.

**Conversion Event** means:

- (iii) (i) the achievement of a Performance Hurdle detailed in Section 8.4(c)(i); or
- (ii) the happening of any of the events detailed in Section 8.4(c)(v).

**Deal** means to sell, transfer, assign, novate, vary, mortgage, encumber, create any equitable interest, share any rights, otherwise deal with any right, title or interest, or agreement to do any of those actions.

**Expiry Date** means the expiry date for a Performance Hurdle as specified in the Performance Hurdle.

**Issue Price of Performance Rights** means \$0.0001 per Performance Right.

**Performance Hurdle** means a Class A Performance Hurdle, Class B Performance Hurdle, Class C Performance Hurdle and/or Class D Performance Hurdle, as the case may be.

**Performance Right** means a right to be issued a Share upon achievement of the relevant Performance Hurdle, issued at the Issue Price and on the terms and conditions detailed in these Terms.

**Shareholder** means a holder of Shares.

**Terms** means these terms of issue which apply to Performance Rights.

**Project** means the Chilwa Heavy Metal Sands Project in Malawi.

(b) **Performance Rights**

- (i) The Performance Rights are issued subject to the Terms.
- (ii) Where lawful, these Terms prevail to the extent of any inconsistency with the Constitution.
- (iii) Once a Conversion Event occurs in respect of Performance Rights and subject to Section 8.4(c)(vi), that number of Performance Rights that are subject to the Conversion Event will be converted to Shares on the basis of one Share for each converting Performance Right, with the Shares ranking equally with all other Shares then on issue.

(c) **Conversion**

- (i) Subject to Sections 8.4(c)(iv) and 8.4(c)(vi), the Company shall procure that:
  - (A) 10,000,000 Performance Rights shall convert to 10,000,000 Shares upon achievement of the Class A Performance Hurdle before (and including) the Expiry Date on the basis of one Share for each Performance Right, failing which these Performance Rights will lapse.
  - (B) 5,000,000 Performance Rights shall convert to 5,000,000 Shares upon achievement of the Class B Performance Hurdle before (and including) the relevant Expiry Date on the basis of one Share for each Performance Right, failing which these Performance Rights will lapse.
  - (C) 5,000,000 Performance Rights shall convert to 5,000,000 Shares upon achievement of the Class C Performance Hurdle before (and including) the Expiry Date on the basis of one Share for each Performance Right, failing which these Performance Rights will lapse.
  - (D) 5,000,000 Performance Rights shall convert to 5,000,000 Shares upon achievement of the Class d Performance Hurdle before (and including) the

Expiry Date on the basis of one Share for each Performance Right, failing which these Performance Rights will lapse.

- (ii) For the purposes of determining whether a specific Performance Hurdle is achieved, the Company's Directors who do not have any personal interest in the determination will cause the Company to obtain an opinion from a suitably qualified independent expert on whether a specific Performance Hurdle is achieved.
- (iii) Conversion into Shares will occur as soon as possible after achievement of the relevant Performance Hurdle but in any event within ten (10) business days after confirmation from the independent expert appointed under Section 8.4(c)(ii) that the Performance Hurdle has been achieved.
- (iv) The Performance Hurdles must be met before the relevant Expiry Date, failing which the relevant class of Performance Rights the subject of the Expiry Date will automatically lapse.
- (v) All Performance Rights on issue will automatically convert into Shares up to a maximum number that is equal to 10% of the Company's issued share capital (as at the date of conversion) upon any of the following events occurring:
  - (A) an offeror (who at the date the Performance Rights are issued does not control the Company) under a takeover offer for all Shares announcing that it has achieved acceptances in respect of more than 50.1% of Shares and that the takeover bid has become unconditional; or
  - (B) an arrangement (other than one under which a person who controls the Company at the date the Performance Rights are issued increases their control) under which all of the Company's Shares are to be either cancelled, transferred to a third party, or a Court by order approves the proposed scheme of arrangement.
- (vi) The Company will at the request of the Holder and if there are reasonable grounds to believe that a Performance Hurdle will be satisfied and conversion will result in a breach of section 606 of the Corporations Act, seek shareholder approval under section 611. If approval is not obtained, the conversion of that number of Performance Rights will be delayed until conversion can occur without any breach of section 606.

(d) **Voting rights**

Each Holder has the right to receive notice of and attend but has no right to vote, except as required by law.

(e) **Dividends**

The Performance Rights do not have any right to receive dividends (whether cash or non-cash) from the profits of the Company at any time.

(f) **Dealings**

A Holder must not Deal with Performance Rights.

(g) **Access to documents and information**

A Holder has the right to receive notices of general meetings and financial reports and accounts of the Company that are circulated to Shareholders, and a right to attend Shareholder meetings.

(h) **Other terms and conditions**

- (i) A Holder will not be entitled to a return on capital, whether in a winding upon, upon reduction of capital or otherwise.
- (ii) A Holder will not be entitled to participate in the surplus profit or assets of the Company on winding up

- (iii) There are no participating rights or entitlements inherent in the Performance Rights and Holders will not be entitled to participate in new issues (such as bonus issues) or pro-rata issues of capital to Shareholders.
- (iv) The Company will issue each Holder with a new holding statement for Shares upon conversion of Performance Rights as soon as practicable following the conversion of Performance Rights .
- (v) The Performance Rights will not be quoted on ASX and are not transferable.
- (vi) All Shares issued upon conversion will rank equally in all respects with the then-issued Shares. the Company must, within the time frame required by the Listing Rules, apply to ASX for quotation of the Shares on ASX.
- (vii) A Performance Right does not give the Holder any rights other than those expressly provided by these Terms and those provided at law where such rights cannot be excluded.
- (viii) The Terms may, subject to the Corporations Act, be amended as necessary by the Directors to comply with the Listing Rules or any directions of ASX regarding the Terms, it being understood that the Company shall use best endeavours to ensure that the Terms are amended only to the extent necessary to comply with the Listing Rules or any reasonable directions of ASX regarding the Terms, and provide both copies of all correspondence with ASX and the Holder a reasonable opportunity to make submissions to ASX.

## 8.5 Remuneration of Directors

Directors are not required under the Company's Constitution to hold any Shares.

Each Non-Executive Director is to receive a fee of \$40,000 per annum commencing on and from the Company being listed on the Official List. The Non-Executive Chairman will receive a fee of \$80,000 plus statutory superannuation per annum. The Managing Director will receive a salary of \$300,000 plus statutory superannuation. All amounts are exclusive of superannuation.

Details of the Directors' remuneration and Relevant Interests in the securities of the Company as at the date of this Prospectus and upon completion of the Offer are set out in Section 8.7 below.

## 8.6 Security holding interests of Directors

As at the date of completion of the Offer, the Relevant Interests of each of the Directors in the Shares of the Company and the Options and Performance Rights proposed to be granted by the Company are as follows:

Director	Shares	Options	Performance Rights
Cadell Buss	100,001	Nil	4,400,000
Philip Lucas	Nil	Nil	1,350,000
Alexander Shaw	200,000	Nil	Nil
Manuel Mota	250,000	Nil	Nil

## 8.7 Agreements with Directors or Related Parties

The Company's policy in respect of related party arrangements is:

- (a) a Director with a material personal interest in a matter is required to give notice to the other Directors before such a matter is considered by the Board; and
- (b) for the Board to consider such a matter and unless the independent Directors determine otherwise, the Director who has a material personal interest is not present while the matter is being considered at the meeting and does not vote on the matter.



Where Luso has the right to appoint a board nominee to the board of the Company, the board nominee:

- (a) subject to Section 8.7(b), may have regard to and represent the interests of the ME Group and act in accordance with the wishes of the ME Group;
- (b) will be responsible for managing their individual conflicts of interest and compliance with their statutory and fiduciary obligations; and
- (c) subject to Section 8.7(b) above, will only be excluded from participating in discussions at a board meeting on a matter, or voting on a matter, where that exclusion is required by applicable law including in accordance with section 195 of the Corporations Act.

### Employment Agreements

- (a) Philip Andrew Lucas is employed as Non-Executive Chairman and has entered into an agreement with the Company. Details of Mr Lucas' remuneration and arrangements are as follows:

Term	Description
Fees and other benefits	<p>\$80,000 per annum plus statutory superannuation plus performance rights.</p> <p>In addition, Mr Lucas is owed accrued Director's fees for the period from incorporation of the Company (February 2022) of \$80,000, and which is payable when the Company has sufficient funds. Mr Lucas has not otherwise been paid or remunerated for these services.</p>
Termination and notice periods	Mr Lucas will hold office until such time as he resigns by written notice and in accordance with the Corporations Act and the Company's Constitution.
Restraints	Mr Lucas shall consult with the Board before accepting any other appointments which might cause a conflict of interest with his duties to the Company.

The Directors, other than Mr Lucas considered the remuneration to be reasonable in the circumstances so that Shareholder approval was not required under Chapter 2E of the Corporations Act.

- (b) Cadell Scott Buss is employed as Managing Director and has entered into an employment agreement with the Company. Details of Mr Buss' remuneration and employment arrangements are as follows:

Term	Description
Salary and other benefits	<p>\$300,000 per annum plus statutory superannuation, plus performance rights.</p> <p>In addition, Mr Buss is entitled to be paid \$140,074 on the Company's admission to the Official List of the ASX in accrued remuneration and to bonus payments of up to a further \$140,000 subject to him achieving specified key performance milestones over the 12 month period after the listing of the Company on the ASX.</p>
Termination and notice periods	12 months.

Term	Description
Restraints	<p>Mr Buss will not engage in any employment other than with the Company or be engaged, concerned or interested in any other business or undertaking (without the Company's prior written consent).</p> <p>Mr Buss may hold the position of non-executive director on the board of another company, provided:</p> <ul style="list-style-type: none"> <li>(i) that the time commitments to such a role are reasonable having regard to Mr Buss' obligations to the Company under his contract of employment with the Company;</li> <li>(ii) that Mr Buss' appointment as non-executive director of the other company has been approved by the Chairman; and</li> <li>(iii) that at all times Mr Buss' obligations under his contract of employment with the Company take priority.</li> </ul> <p>Mr Buss agrees that, should the Board raise concerns with respect to the continuation of the non-executive role described above, Mr Buss will discuss those concerns with the Board in good faith with a view to resolving such concerns to the satisfaction of the Board.</p>

The Directors, other than Mr Buss considered the remuneration to be reasonable in the circumstances so that Shareholder approval was not required under Chapter 2E of the Corporations Act.

- (c) Alexander Iain Shaw is employed as Non-Executive Director and has entered into an agreement with the Company. Details of Mr Shaw's remuneration and employment arrangements are as follows:

Term	Description
Fees and other benefits	\$40,000 per annum.
Termination and notice periods	Mr Shaw will hold office until such time as he resigns by written notice and in accordance with the Corporations Act and the Company's Constitution.
Restraints	Mr Shaw shall consult with the Board before accepting any other appointments which might cause a conflict of interest with his duties to the Company.

- (d) Manuel Mota is employed as Non-Executive Director and has entered into an agreement with the Company. Details of Mr Mota's remuneration and employment arrangements are as follows:

Term	Description
Fees and other benefits	\$40,000 per annum.

Term	Description
Termination and notice periods	Mr Mota will hold office until such time as he resigns by written notice and in accordance with the Corporations Act and the Company's Constitution.
Restraints	Mr Mota shall consult with the Board before accepting any other appointments which might cause a conflict of interest with his duties to the Company.

- (e) John Lewis is employed as CFO and Company Secretary and has entered into an agreement with the Company. Details of Mr Lewis' remuneration and employment arrangements are as follows:

Term	Description
Fees and Other benefits	Mr Lewis services are employed through a service company which charges \$250 per hour for these services. Mr Lewis is also entitled to participate in the Company's LTIP.
Termination and notice periods	There is no termination or notice period under the terms of employment with Mr Lewis.
Conflict of Interest	There are no restrictions on Mr Lewis' ability to act for other entities. Mr Lewis is current the company secretary of Morella Corporation Limited (ASX: 1MC).

#### **Deeds of indemnity, insurance and access**

The Company has entered into a deed of indemnity, insurance and access with each of its Directors. Under these deeds, the Company agrees to indemnify each officer to the extent permitted by the Corporations Act against any liability arising as a result of the officer acting as an officer of the Company. The Company is also required to maintain insurance policies for the benefit of the relevant officer and must also allow the officers to inspect Board papers in certain circumstances.

#### **8.8 Interests of Directors**

Other than as set out in this Prospectus, no Director holds, or has held within the 2 years preceding lodgement of this Prospectus with ASIC, any interest in:

- (a) the formation or promotion of the Company;
- (b) any property acquired or proposed to be acquired by the Company in connection with:
  - (i) its formation or promotion; or
  - (ii) the Offer; or
- (c) the Offer,

and no amounts have been paid or agreed to be paid and no benefits have been given or agreed to be given to a Director:

- (a) as an inducement to become, or to qualify as, a Director; or
- (b) for services provided in connection with:
  - (i) the formation or promotion of the Company; or
  - (ii) the Offer.

Mr Lucas is a director and shareholder in Allion Partners Pty Ltd (**Allion Partners**). Allion Partners has provided legal services to the Company and to the date of this Prospectus has been paid (or is entitled to be paid) \$171,365 (excluding GST and disbursements). Allion Partners may be paid further amounts on normal commercial rates.

The Directors, other than Mr Lucas considered to fees paid for the legal services provided be to be reasonable in the circumstances as if the Company and Allion Legal were dealing at arm's length so that Shareholder approval was not required under Chapter 2E of the Corporations Act.

## 8.9 Interests of Experts and Advisors

Other than as set out below or elsewhere in this Prospectus, no:

- (a) person named in this Prospectus as performing a function in a professional, advisory or other capacity in connection with the preparation or distribution of this Prospectus;
- (b) promoter of the Company; or
- (c) a financial services licensee named in this Prospectus as a financial services licensee involved in the issue,

holds, or has held within the 2 years preceding lodgement of this Prospectus with ASIC, any interest in:

- (a) the formation or promotion of the Company;
- (b) any property acquired or proposed to be acquired by the Company in connection with:
  - (i) its formation or promotion; or
  - (ii) the Offer; or
- (c) the Offer,

and no amounts have been paid or agreed to be paid and no benefits have been given or agreed to be given to any of these persons for services provided in connection with:

- (a) the formation or promotion of the Company; or
- (b) the Offer.

AMC Consultants (UK) Limited has acted as the Independent Geologist and has prepared the Independent Geologist's Report included in Annexure A of this Prospectus. AMC will be paid \$52,000 (excluding GST) in respect of these services. During the 24 months preceding lodgement of this Prospectus with ASIC, AMC has not received any other fees from the Company.

Stantons has acted as Independent Accountant and has prepared the Independent Limited Assurance Report which is included in Annexure B of this Prospectus. The Company estimates it will pay Stantons a total of \$10,000 (excluding GST) for these services. During the 24 months preceding lodgement of this Prospectus with ASIC, Stantons has not received any other fees from the Company.

Sequoia has acted as Lead Manager in relation to the Offer. The Company will pay Sequoia the fees described in Section 7.5 for these services. During the 24 months preceding lodgement of this Prospectus with ASIC, Sequoia has not received any other fees from the Company.

Atkinson Corporate Lawyers has acted as the Australian solicitor to the Company in relation to the Offer. The Company estimates it will pay Atkinson Corporate Lawyers \$77,500 (excluding GST) for these services. Subsequently, fees will be charged in accordance with normal charge out rates. During the 24 months preceding lodgement of this Prospectus with ASIC, Atkinson Corporate Lawyers has not received any other fees from the Company.

Singano Purshotam Law Consultants has acted as the in-country solicitors to the Company and has prepared the Solicitor's Report which is included in Annexure D of this Prospectus. The Company estimates it will pay Singano Purshotam Law Consultants \$65,000 (excluding GST) for these services. Subsequently, fees will be charged in accordance with normal charge out rates. During the 24 months preceding lodgement of this Prospectus with ASIC, Singano Purshotam Law Consultants has not received any other fees from the Company.

BDO Corporate Finance (WA) Pty Limited has prepared an independent expert's report required by ASX Guidance Note 19 which is included in Annexure C of this Prospectus. The Company estimates it will pay BDO a total of \$30,000 (excluding GST) for these services. Subsequently, fees will be charged

in accordance with normal charge out rates. During the 24 months preceding lodgement of this Prospectus with ASIC, BDO has received fees in the amount of \$15,000, from the Company, as part payment of the above.

## 8.10 Consents

Each of the parties referred to in this Section:

- (a) does not make, or purport to make, any statement in this Prospectus other than those referred to in this Section; and
- (b) to the maximum extent permitted by law, expressly disclaim and take no responsibility for any part of this Prospectus other than a reference to its name and a statement included in this Prospectus with the consent of that party as specified in this Section.

AMC Consultants (UK) Limited has given its written consent to being named as the Independent Geologist in this Prospectus and to the inclusion of the Independent Geologist's Report included in Annexure A of this Prospectus in the form and context in which the information and report is included. AMC has not withdrawn its consent prior to lodgement of this Prospectus with ASIC.

Stantons has given its written consent to being named as the Independent Accountant in this Prospectus and to the inclusion of the Independent Limited Assurance Report in Annexure B of this Prospectus in the form and context in which the information and report is included. Stantons has not withdrawn its consent prior to lodgement of this Prospectus with ASIC.

Sequoia has given, and at the time of lodgement of this Prospectus, has not withdrawn its consent to be named as Lead Manager to the offer of securities under this Prospectus, in the form and context in which it is named.

Sequoia was not involved in the preparation of any part of this Prospectus and did not authorise or cause the issue of this Prospectus. Sequoia makes no express or implied representation or warranty in relation to this Prospectus or the offer and does not make any statement in this Prospectus, nor is any statement in it based on any statement made by Sequoia. To the maximum extent permitted by law, Sequoia expressly disclaims and takes no responsibility for any material in, or omission from, this Prospectus other than the reference to its name.

Atkinson Corporate Lawyers has given his written consent to being named as the solicitor to the Company in the form and context in which he is named and has not withdrawn his consent prior to the lodgement of this Prospectus with ASIC.

Singano Purshotam Law Consultants has given its written consent to being named as the in-country solicitors to the Company in the form and context in which it is named and has not withdrawn its consent prior to the lodgement of this Prospectus with ASIC.

BDO Corporate Finance (WA) Pty Limited has given its written consent to being named as the independent expert to the Company in the form and context in which it is named and has not withdrawn its consent prior to the lodgement of this Prospectus with ASIC.

## 8.11 Expenses of the Offer

The total cash costs of the Offer (excluding GST) are estimated to be approximately \$800,000 based on a \$8,000,000 capital raise and are expected to be applied towards the items set out in the table below:

Item of Expenditure	Amount
ASIC and ASX fees	\$92,324
Lead Manager Fees	\$480,000
Independent Accountant's Fees	\$20,000
Independent Expert Fees (BDO)	\$15,000
Legal Fees (Australia)	\$176,146

Legal Fees (Malawi)	\$5,000
Independent Geologist's Fees	\$25,076
Registry and other expenses	\$25,000
<b>TOTAL</b>	<b>\$838,546</b>

The above outstanding costs of the offer include cash costs only. The Company has entered an agreement with Sequoia to act as lead manager. Under that agreement Sequoia will receive Options valued using the Black-Scholes method at \$303,611.

## **8.12 Continuous disclosure obligations**

Following admission of the Company to the Official List, the Company will be a "disclosing entity" (as defined in section 111AC of the Corporations Act) and, as such, will be subject to regular reporting and disclosure obligations. Specifically, like all listed companies, the Company will be required to continuously disclose any information it has to the market which a reasonable person would expect to have a material effect on the price or the value of the Company's securities.

Price sensitive information will be publicly released through ASX before it is disclosed to shareholders and market participants. Distribution of other information to shareholders and market participants will also be managed through disclosure to the ASX. In addition, the Company will post this information on its website after the ASX confirms an announcement has been made, with the aim of making the information readily accessible to the widest audience.

## **8.13 Electronic Prospectus**

Pursuant to Regulatory Guide 107, ASIC wishes to encourage the distribution of an electronic prospectus and electronic application form, subject to compliance with certain requirements.

If you have received this Prospectus as an electronic Prospectus, please ensure that you have received the entire Prospectus accompanied by the Application Form. If you have not, please contact the Company and the Company will send you, for free, either a hard copy or a further electronic copy of this Prospectus or both. Alternatively, you may obtain a copy of this Prospectus from the website of the Company at [www.chilwaminerals.com.au](http://www.chilwaminerals.com.au).

The Company reserves the right not to accept an Application Form from a person if it has reason to believe that when that person was given access to the electronic Application Form, it was not provided together with the electronic Prospectus and any relevant supplementary or replacement prospectus or any of those documents were incomplete or altered.

## **8.14 Financial Forecasts**

The Directors have considered the matters set out in ASIC Regulatory Guide 170 and believe that they do not have a reasonable basis to forecast future earnings on the basis that the operations of the Company are inherently uncertain. Accordingly, any forecast or projection information would contain such a broad range of potential outcomes and possibilities that it is not possible to prepare a reliable best estimate forecast or projection.

## **8.15 Privacy statement**

If you complete an Application Form, you will be providing personal information to the Company. The Company collects, holds and will use that information to assess your application, service your needs as a Shareholder and to facilitate distribution payments and corporate communications to you as a Shareholder.

The information may also be used from time to time and disclosed to persons inspecting the register, including bidders for your securities in the context of takeovers, regulatory bodies including the Australian Taxation Office, authorised securities brokers, print service providers, mail houses and the share registry.

You can access, correct and update the personal information that we hold about you. If you wish to do so, please contact the share registry at the relevant contact number set out in this Prospectus.

Collection, maintenance and disclosure of certain personal information are governed by legislation including the *Privacy Act 1988* (Cth), the Corporations Act and certain rules such as the ASX Settlement Operating Rules. You should note that if you do not provide the information required on the application for Shares, the Company may not be able to accept or process your application.

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**9. DIRECTORS' AUTHORISATION**

This Prospectus is issued by the Company and its issue has been authorised by a resolution of the Directors.

In accordance with section 720 of the Corporations Act, each Director has consented to the lodgement of this Prospectus with ASIC.



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Cadell Buss

**For and on behalf of Chilwa Minerals Limited**



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## 10. GLOSSARY

Where the following terms are used in this Prospectus they have the following meanings:

**\$** means an Australian dollar.

**Allion Partners** means Allion Partners Pty Ltd (ACN 109 326 463).

**Applicant** means a person who submits an Application Form.

**Application Form** means the application form attached to or accompanying this Prospectus relating to the Offer.

**ASIC** means Australian Securities & Investments Commission.

**ASX** means ASX Limited (ACN 008 624 691) or the financial market operated by it as the context requires.

**ASX Listing Rules** means the official ASX Listing Rules of ASX.

**ASX Settlement Operating Rules** means the rules of the ASX as amended, varied or waived from time to time.

**Australian Accounting Standards** means Australian Accounting Standards and other authoritative pronouncements issued by the Australian Accounting Standards Board and Urgent Issues Group interpretations.

**BDO** means BDO Corporate Finance (WA) Pty Ltd (ACN 124 031 045).

**Board** means the board of Directors as constituted from time to time.

**CAP** means Chilwa Alkaline Province.

**Closing Date** means the date on which the Offer closes, being 5 May 2023 (subject to the Company reserving the right to extend the Closing Date or close the Offer early).

**CMA** means Chilwa Minerals Africa Limited, an entity incorporated in Malawi with company number COY-O6FJA3, which will hold the Tenements that comprise the Project.

**Company** or **Chilwa** means Chilwa Minerals Limited (ACN 656 965 589).

**Constitution** means the constitution of the Company.

**Corporations Act** means the *Corporations Act 2001* (Cth).

**Director** means a director of the Company at the date of this Prospectus.

**Drilling Contract** means the contract entered into by the Company and ME Africa on or about 29 March 2023 for the provision of drilling and other related services, the material terms of which are summarised in Section 7.4.

**EL** means exploration licence.

**ESG Policy** means the Environmental, Social and Governance Policy of the Company.

**Exploration Program and Budget** means the exploration program and budget for the Project.

**Exposure Period** has the meaning given to that term in the 'Important Notices' section of this Prospectus.

**Financial Information** has the meaning given to that term in Section 5.1.

**Free Float** has the meaning given to that term in the ASX Listing Rules.

**FSMA** means the Financial Services and Markets Act 2000 (UK).

**FPO** means the Financial Services and Markets Act 2000 (Financial Promotions) Order 2005 (UK).

**GDP** means gross domestic profit.

**Heavy Minerals** are a group of minerals such as ilmenite, rutile and zircon commonly found together as coarse and fine grain sands.

**Heavy Mineral Sands** are a class of ore deposit which are an important source of zirconium, titanium, thorium, tungsten, rare-earth elements, the industrial minerals diamond, sapphire, garnet, and occasionally precious metals or gemstones.

**HMS** means Heavy Mineral Sands.

**Historical Financial Information** has the meaning given to that term in Section 5.1.

**Independent Accountant** means Stantons Corporate Finance Pty Ltd (ACN 128 908 289).

**Independent Expert's Report** means the report set out in Annexure C of this Prospectus.

**Independent Geologist** means Mark Burnett, an employee of AMC Consultants (UK) Limited (Company number 03688365).

**Independent Geologist's Report** means the report set out in Annexure A of this Prospectus.

**Independent Limited Assurance Report** means that report set out in Annexure B of this Prospectus.

**Inferred Mineral Resource** means a part of a Mineral Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence.

**JORC Code** means the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" by the Joint Ore Reserves Committee.

**Lead Manager** means Sequoia.

**License** means the Exclusive Prospecting License EL0572/20 at the Project.

**LTIP** means the Company's long term incentive plan, which is summarised in Section 7.6.

**Luso** means Luso Global Mining BV, the holding company of MEIML.

**Mandate** means the lead manager mandate entered into between the Company and Sequoia, dated 1 September 2022.

**ME Group** means the Mota-Engil Group, a Portuguese multinational organisation that controls MEIML and Luso.

**ME Africa** means Mota-Engil Engenharia e Construção África, S.A.

**MEIML** means Mota-Engil Investments (Malawi) Limited.

**Mining Act** means *Mines and Minerals Act No. 8* of 2019.

**Minimum Subscription** has the meaning given to that term in Section 2.2.

**Mineral Resource** means a concentration or occurrence of material of intrinsic economic interest on the earth's crust in such form and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

**MRE** means an inferred mineral resource estimate.

**Offer** means the offer of Shares to the public pursuant to this Prospectus as set out in Section 2.1 of this Prospectus.

**Offer Period** means the period from the Opening Date until the Closing Date.

**Offer Price** means \$0.20.

**Official List** means the official list of ASX.

**Official Quotation** means official quotation by ASX in accordance with the ASX Listing Rules.

**Opening Date** means the date on which the Offer opens, being 17 April 2023 (subject to any extension of the exposure period).

**Option** means an option to acquire a Share.

**Performance Right** means a performance right to acquire Shares under the terms of the LTIP if the applicable performance conditions are satisfied or waived.

**Pre-IPO Placement** means the placement of 8,200,000 Shares to various investors that took place prior to the Offer.

**Pro Forma Statement of Financial Position** has the meaning given to that term in Section 5.1.

**Project** means the Lake Chilwa Heavy Mineral Sands Project.

**Prospectus** means this prospectus.

**Provinces** means the Provinces of British Columbia, Ontario and Quebec in Canada.

**Relevant Interest** has the meaning given in sections 608 and 609 of the Corporations Act.

**Restricted Securities** has the meaning given to that term in Section 2.12.

**Section** means a section of this Prospectus.

**Securities** has the meaning given to that term in the ASX Listing Rules.

**Sequoia** means Sequoia Corporate Finance Pty Ltd (ACN 602 219 072).

**Services Agreement** means the agreement to be entered into by the Company, CMA and ME Africa on completion occurring under the Share Sale Agreement for the provision of mining services, the material terms of which are summarised in Section 7.3.

**SCA** means the Securities and Commodities Authority, a body located in the UAE.

**SG** means specific gravity, which is a measure of the density of a substance relative to the density of water at a standard temperature and pressure.

**Share** means a fully paid ordinary share in the capital of the Company.

**Share Registry** means Automic Pty Ltd.

**Share Sale Agreement** means the agreement entered into by the Company, Luso and MEIML on or about 4 April 2023 pursuant to which the Company agreed to buy, and Luso agreed to sell, the Project to the Company, the material terms of which are summarised in Section 7.2.

**Shareholder** means a holder of a Share.

**Solicitor's Report** means the report set out in Annexure D of this Prospectus.

**Stantons** means Stantons Corporate Finance Pty Ltd (ACN 128 908 289).

**Tenements** means the Malawian exploration licences EL0670/22 and EL0671/22, and any tenement or licence that is a successor, renewal, modification, extension or substitute for the whole or part of any such tenement or licence.

**THM** means Total Heavy Minerals and refers to the total amount of heavy minerals concentrated from a bulk sample of mineral sands.

**Transaction** has the meaning given to that term in the 'Important Notices' section of this Prospectus.

**UAE** means United Arab Emirates.

**WST** means Western Standard Time as observed in Perth, Western Australia.

**ANNEXURE A - INDEPENDENT GEOLOGIST'S REPORT**

**AMC Consultants (UK) Limited**

Registered in England and Wales - Company No 3688365

Building 3, 1st Floor  
Concorde Park, Concorde Road  
Maidenhead SL6 4BY  
United Kingdom

T +44 1628 778 256  
E maidenhead@amcconsultants.com  
W amcconsultants.com



# Report

## Independent Geologist's Report Chilwa Minerals Ltd

AMC Project 422008\_06  
20 March 2023

## Executive summary

Chilwa Minerals Ltd (CML) engaged AMC Consultants (UK) Limited (AMC) to provide an Independent Geologist's Report (IGR) on the Chilwa Heavy Mineral Sands Project (Project) located on the shores of Lake Chilwa, Republic of Malawi (Malawi).

The Project is comprised of two Exploration Licences (ELs):

- Chilwa Island - On the 26 September 2022, Mota-Engil Investments (Malawi) Limited (MEIML), a party related to Luso Global Mining B.V. (LGM), was granted Exploration Licence (EL) 0671/22 (Chilwa Island), allowing it to explore for heavy mineral sands (HMS) deposits over an area of 12.84 km<sup>2</sup> on Chilwa Island. The licence is valid for three years, with an option to extend the term in accordance with Section 119 of the (Malawian) Mines and Minerals Act (Act number 8 of 2019). However, CML has informed AMC that it has no plans to explore for or mine HMS deposits on Chilwa Island at this stage.
- Lake Chilwa - On 27 September 2022, EL 0670/22 (Lake Chilwa) was granted to MEIML, allowing it to explore for HMS deposits over an area of 865.86 km<sup>2</sup> located on the shores and hinterland around Lake Chilwa. The licence is valid for three years, with an option to extend the term in accordance with Section 119 of the (Malawian) Mines and Minerals Act. Exploration on this EL is planned to commence in Q4 2022.

The principal sources of information used by AMC to compile this IGR are technical reports and data variously compiled by AMC and/or MEIML, LGM or CML for the purposes of internal review or/and as a resource for review by an independent consultant for the listing, CML, and its staff or consultants, publicly available information, government reports, and AMC's discussions with CML's technical and corporate management personnel.

AMC has been advised that the acquisition of the Project will be made pursuant to a share sale agreement with MEIML (the vendor of the Project) and LGM (the holding company of MEIML) whereby CML agreed to purchase 100% of the issued share capital in a special-purpose vehicle that will hold the tenements.

AMC understands that:

- A prospectus (Prospectus) for listing of CML on the Australian Securities Exchange (ASX) is to be prepared by CML.
- The Prospectus is to be lodged with the Australian Securities and Investments Commission (ASIC) in or approximately the 1<sup>st</sup> quarter of 2023.
- The Prospectus will relate to a capital raising of A\$8 million before the costs of issue which includes preparation of the Prospectus, listing on the ASX, and associated fees and charges.
- This IGR, provided by AMC, is to be included in the Prospectus.

The objective of this IGR is for AMC to provide:

- A technical review of the ELs currently held by MEIML that CML will be acquiring.
- A geological description of the ELs that comprise the Project.
- An outline of exploration work completed to date as well as the associated Mineral Resource estimates (MREs) for the Project, prepared by AMC, noting that the estimates have been classified, by AMC at the Inferred Mineral Resource level of geological confidence as defined in the JORC Code<sup>1</sup>.
- An opinion on the prospectivity of the ELs.
- Comment on the exploration programmes proposed by CML for the Project over the next two years and associated cost estimates.

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<sup>1</sup> Australasian Joint Ore Reserves Committee (JORC), Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code), 2012 edn, effective December 2012, 44 pp., available [http://www.jorc.org/docs/JORC\\_code\\_2012.pdf](http://www.jorc.org/docs/JORC_code_2012.pdf).

This IGR has been prepared:

- In the form of an independent technical specialist's report intended to be made public.
- In accordance with the guidelines of the VALMIN Code<sup>2</sup> and the JORC Code.

The key technical aspects of the Project, and CML's exploration strategy and proposed work plan for the Project can be summarized as follows.

## Geology and Mineral Resources

The Project has been shown consist of eight mineralized occurrences, located within Chilwa Lake (EL 0670/22,) which contain heavy minerals sands (HMS).

No exploration has been undertaken on Chilwa Island for HMS deposits. As noted above, AMC has been informed by CML that it has no intention at this stage, to explore for, or mine, HMS material on the island.

AMC has classified the MREs at the Inferred level of confidence and they have been reported accordingly. The MREs, reported at total heavy mineral (THM) cut-off grades of 1.0%, 1.5%, and 3.0% are presented in Table ES1, Table ES2, and Table ES3 respectively. The effective date of the MRE is 31 July 2022.

Table ES1 Chilwa Heavy Mineral Sands Project – Inferred Mineral Resources at 1.0% THM as at 31 July 2022

Deposit	Volume (million m <sup>3</sup> )	Tonnes (million t)	Dry Density (t/m <sup>3</sup> )	Gangue (%)	Ilmenite (%)	Slimes (%)	THM (%)	Zircon (%)
Bimbi	1.5	2.6	1.7	0.7	4.3	15.3	5.3	0.3
Northeast Bimbi	3.6	6.1	1.7	0.3	2.2	15.9	2.7	0.1
Mposa (Main)	11.7	19.4	1.7	0.7	3.2	11.7	4.3	0.4
Mposa (North)	0.6	1.0	1.7	0.3	1.4	8.3	1.9	0.2
Mpyupyu (dune)	2.0	3.5	1.7	1.2	5.7	15.3	7.1	0.2
Mpyupyu (flat)	9.5	16.4	1.7	0.5	2.9	15.4	3.6	0.2
Nkotamo	0.1	0.2	1.5	1.1	3.0	28.3	4.2	0.2
Halala	6.0	8.9	1.5	0.9	2.6	9.8	3.7	0.2
Beacon	0.4	0.6	1.5	0.6	1.8	17.7	2.5	0.1
Namanja West	2.0	2.9	1.5	0.8	2.3	14.7	3.3	0.2
<b>Total</b>	<b>37.5</b>	<b>61.6</b>	<b>1.6</b>	<b>0.7</b>	<b>3.0</b>	<b>13.3</b>	<b>3.9</b>	<b>0.3</b>

- Estimates of the Mineral Resource were prepared by AMC Consultants (UK) Limited (AMC).
- In situ, dry metric tonnes have been reported using varying densities and slime cut-off per deposit.
- Material below 30% slimes for Halala, 20% slimes for Bimbi, Northeast Bimbi and Mpyupyu (dune and flat) and 25% slimes for Mposa (Main and North). All other deposits are a stated using 30% slimes cut-off.
- Tonnages and grades have been rounded to reflect the relative uncertainty of the estimates and resultant confidence levels used to classify the estimates. As such, columns may not total.
- Estimates of the Mineral Resource have been constrained by ultimate pit shells to demonstrate RPEEE.
- Estimates are classified as Inferred according to JORC Code.

<sup>2</sup> Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets (The Valmin Code), 2105 edn. effective 30 January 2016, 42 pp, available < [https://www.aig.org.au/wp-content/uploads/2020/08/VALMIN\\_Code\\_2015\\_final.pdf](https://www.aig.org.au/wp-content/uploads/2020/08/VALMIN_Code_2015_final.pdf)>.

Table ES2 Chilwa Heavy Mineral Sands Project – Inferred Mineral Resources at 1.5% THM as at 31 July 2022

Deposit	Volume (million m <sup>3</sup> )	Tonnes (million t)	Dry Density (t/m <sup>3</sup> )	Gangue (%)	Ilmenite (%)	Slimes (%)	THM (%)	Zircon (%)
Bimbi	1.5	2.6	1.7	0.7	4.3	15.3	5.3	0.3
Northeast Bimbi	3.5	6.0	1.7	0.4	2.2	15.9	2.7	0.1
Mposa (Main)	11.2	18.5	1.7	0.7	3.3	11.5	4.4	0.4
Mposa (North)	0.4	0.6	1.7	0.4	1.8	8.7	2.3	0.2
Mpyupyu (dune)	2.0	3.5	1.7	1.2	5.7	15.3	7.1	0.2
Mpyupyu (flat)	9.0	15.6	1.7	0.5	3.0	15.3	3.7	0.2
Nkotamo	0.1	0.2	1.5	1.1	3.0	28.3	4.2	0.2
Halala	5.9	8.7	1.5	0.9	2.6	9.7	3.7	0.2
Beacon	0.4	0.6	1.5	0.6	1.8	17.7	2.6	0.1
Namanja West	2.0	2.9	1.5	0.8	2.3	14.6	3.3	0.2
<b>Total</b>	<b>36.0</b>	<b>59.2</b>	<b>1.6</b>	<b>0.7</b>	<b>3.1</b>	<b>13.2</b>	<b>4.1</b>	<b>0.3</b>

- Estimates of the Mineral Resource were prepared by AMC Consultants (UK) Limited (AMC).
- In situ, dry metric tonnes have been reported using varying densities and slime cut-off per deposit.
- Material below 30% slimes for Halala, 20% slimes for Bimbi, Northeast Bimbi and Mpyupyu (dune and flat) and 25% slimes for Mposa (Main and North). All other deposits are a stated using 30% slimes cut-off.
- Tonnages and grades have been rounded to reflect the relative uncertainty of the estimates and resultant confidence levels used to classify the estimates. As such, columns may not total.
- Estimates of the Mineral Resource have been constrained by ultimate pit shells to demonstrate RPEEE.
- Estimates are classified as Inferred according to JORC Code.

Table ES3 Chilwa Heavy Mineral Sands Project – Inferred Mineral Resources at 3.0% THM as at 31 July 2022

Deposit	Volume (million m <sup>3</sup> )	Tonnes (million t)	Dry Density (t/m <sup>3</sup> )	Gangue (%)	Ilmenite (%)	Slimes (%)	THM (%)	Zircon (%)
Bimbi	1.3	2.2	1.7	0.7	4.8	15.0	5.8	0.3
Northeast Bimbi	0.9	1.6	1.7	0.4	2.8	16.0	3.4	0.2
Mposa (Main)	6.9	11.4	1.7	0.9	4.3	10.2	5.7	0.6
Mposa (North)	0.1	0.1	1.7	0.6	2.8	9.9	3.8	0.4
Mpyupyu (dune)	1.9	3.2	1.7	1.3	6.0	15.1	7.5	0.2
Mpyupyu (flat)	5.6	9.7	1.7	0.6	3.8	16.0	4.6	0.2
Nkotamo	0.1	0.1	1.5	1.1	3.2	28.1	4.5	0.2
Halala	3.5	5.3	1.5	1.2	3.3	7.3	4.6	0.2
Beacon	0.1	0.1	1.5	0.9	2.4	15.5	3.5	0.2
Namanja West	1.1	1.7	1.5	1.0	2.7	13.1	3.9	0.2
<b>Total</b>	<b>21.5</b>	<b>35.5</b>	<b>1.6</b>	<b>0.9</b>	<b>4.0</b>	<b>12.4</b>	<b>5.2</b>	<b>0.3</b>

- Estimates of the Mineral Resource were prepared by AMC Consultants (UK) Limited (AMC).
- In situ, dry metric tonnes have been reported using varying densities and slime cut-off per deposit.
- Material below 30% slimes for Halala, 20% slimes for Bimbi, Northeast Bimbi and Mpyupyu (dune and flat) and 25% slimes for Mposa (Main and North). All other deposits are a stated using 30% slimes cut-off.
- Tonnages and grades have been rounded to reflect the relative uncertainty of the estimates and resultant confidence levels used to classify the estimates. As such, columns may not total.
- Estimates of the Mineral Resource have been constrained by ultimate pit shells to demonstrate RPEEE.
- Estimates are classified as Inferred according to JORC Code.



An additional four geochemical anomalies have been identified from historical records that will be drilled as part of CML's proposed exploration programme for Lake Chilwa. In AMC's opinion, there is no certainty that exploration activities on these anomalies will result in the estimation of a Mineral Resource.

## **Exploration strategy and proposed work plan**

A total of A\$4.5 million over a two-year period, has been budgeted by CML for:

- Salaries for exploration staff.
- Physical exploration activities.
- Geological, hydrological, and geo-hydrological studies.
- MREs.
- Technical studies and feasibility studies.
- Rehabilitation work.
- Maintenance and renewal of the ELs
- Indirect costs such as the cost of land access and administration.
- Other activities or arrangements as required.

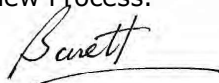
AMC considers the exploration budget to be reasonable when compared to similar HMS exploration projects. Given the potential for further exploration success on the ELs, AMC is of the opinion that the exploration programme, exploration methodology, and exploration timeline follow normal industry standards.

AMC notes that exploration is to be focused on the Lake Chilwa EL and no prospecting, exploration, or mining activities are planned, at this stage, for the Chilwa Island EL.

## Quality control

The signing of this statement confirms this report has been prepared and checked in accordance with the AMC Peer Review Process.

**Project Manager**



Mark Burnett

**20 March 2023**

Date

**Peer Reviewer**



Lawrie Gillett

**20 March 2023**

Date

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## Appendices

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## Distribution list

- 1 e-copy to Chilwa Minerals Ltd
- 1 e-copy to AMC’s Maidenhead office

<b>OFFICE USE ONLY</b> Version control (date and time) 17 March 2023 13:30
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## 1 Introduction

### 1.1 Terms of Reference

Chilwa Minerals Ltd (CML) requested AMC Consultants (UK) Limited (AMC) to provide an Independent Geologist's Report (IGR) for its Chilwa Heavy Mineral Sands Project (Project), located on the shores of Lake Chilwa and Chilwa Island, Republic of Malawi (Malawi).

AMC understands that this IGR will be included in a prospectus (the Prospectus) to be lodged with the Australian Securities & Investments Commission (ASIC) in or approximately the 1st quarter 2023, with the intent being to raise A\$8 million before the costs of issue which include preparation of a Prospectus and listing on the Australian Securities Exchange (ASX).

This IGR has been prepared as a public document in the format of an independent technical specialist's report and provides the reader with a technical review of the Exploration Licences (ELs), currently held by Mota-Engil Investments (Malawi) Limited (MEIML), that CML will be earning into. As such, this IGR has been undertaken in accordance with the 2015 VALMIN Code (VALMIN) and the 2012 JORC Code (JORC).

### 1.2 Purpose

The objectives of this IGR are:

- Present an independent geological appraisal of the ELs currently held by MEIML.
- Comment on previously completed exploration and planned exploration work to be undertaken on the Project.
- Comment on CML's proposed budgeted exploration programme(s) over the next two years.
- Report a maiden Mineral Resource Estimate (MRE) for the Project.

This IGR is based on, and fairly reflects, the information and supporting documentation provided by CML as referenced in this IGR. This IGR contains all the relevant technical information at the date of disclosure which investors and their professional advisors would reasonably require in making a reasoned and balanced judgement regarding the Project.

This IGR specifically excludes:

- Legal validation/verification of tenement standing and licences (refer to section 1.5 of this IGR).
- Assessment of sovereign risk.
- Environmental aspects.

In 2021, AMC prepared a MRE on the known heavy mineral sands (HMS) deposits present on the Project. This was an update of the unpublished MREs prepared by AMC in 2016.

### 1.3 Mineral assets

The Project is located in southern Malawi along the shores of Lake Chilwa.

The HMS potential in the Project area was previously researched, explored, or assessed as follows:

- In 1981, Lancaster researched the Halala/Namanja Sand Bar deposit in terms of formation and physical characteristics (Lancaster, 1981).
- In 2007, Dill and Ludwig studied the geomorphological-sedimentological aspects of the Mpyupyu deposit (Dill and Ludwig, 2007).
- Between 1991 and 1993, Claus Brinkmann worked on the Mpyupyu deposit as part of an initiative by the German Government to aid mineral development in Malawi (Brinkmann, 1991; Brinkmann, 1992; Brinkman, 1993).



- During the early 2000s, Millennium Mining Limited (MML) undertook exploration work on the northern shore deposits of Halala and Namanja.
- In 2014, Tate Minerals (Tate) undertook a desktop review of the work undertaken by Claus Brinkmann. MML entered a Joint Venture (JV) with MEIML to explore EL 0572/20.
- In August 2015, MEIML commenced a drilling programme to the Mpyupyu, Halala, Mposa, and Bimbi targets. This work was completed in November 2015.
- In 2016, AMC prepared a MRE for internal use by MEIML. During this process, it was found that assaying had not been undertaken correctly by the assay laboratory and the effected samples had to be re-assayed.
- In May 2021, AMC updated the MRE following the receipt of the re-assayed sample data. This MRE is declared as part of this IGR.

EL0670/22 (Chilwa Lake), covers an area of 865.86 km<sup>2</sup>, and is considered to be prospective for deposits of HMS, as demonstrated by the presence of eight mineralized occurrences along the shores of Lake Chilwa, (namely the North shore deposits: Halala and the West Shore deposits of: Mposa, Bimbi, Mpyupyu as well as Bimbi East and Mpyupyu East), for which AMC has prepared Maiden MREs, which have been reported at the Inferred level of geological confidence in accordance with the requirements of the JORC Code.

No exploration work has been undertaken on EL 0671/22 (Chilwa Island). AMC has been informed by CML that it has no plans, at the current time, to undertake prospecting, exploration, or mining activities on Chilwa Island.

The results of the MREs are reported in Table 1.1 to Table 1.3.

Table 1.1 Chilwa Heavy Mineral Sands Project – Mineral Resources at 1.0% THM as at 31 July 2022.

Deposit	Volume (million m <sup>3</sup> )	Tonnes (million t)	Dry Density (t/m <sup>3</sup> )	Gangue (%)	Ilmenite (%)	Slimes (%)	THM (%)	Zircon (%)
Bimbi	1.5	2.6	1.7	0.7	4.3	15.3	5.3	0.3
Northeast Bimbi	3.6	6.1	1.7	0.3	2.2	15.9	2.7	0.1
Mposa (Main)	11.7	19.4	1.7	0.7	3.2	11.7	4.3	0.4
Mposa (North)	0.6	1.0	1.7	0.3	1.4	8.3	1.9	0.2
Mpyupyu (dune)	2.0	3.5	1.7	1.2	5.7	15.3	7.1	0.2
Mpyupyu (flat)	9.5	16.4	1.7	0.5	2.9	15.4	3.6	0.2
Nkotamo	0.1	0.2	1.5	1.1	3.0	28.3	4.2	0.2
Halala	6.0	8.9	1.5	0.9	2.6	9.8	3.7	0.2
Beacon	0.4	0.6	1.5	0.6	1.8	17.7	2.5	0.1
Namanja West	2.0	2.9	1.5	0.8	2.3	14.7	3.3	0.2
<b>Total</b>	<b>37.5</b>	<b>61.6</b>	<b>1.6</b>	<b>0.7</b>	<b>3.0</b>	<b>13.3</b>	<b>3.9</b>	<b>0.3</b>

- Estimates of the Mineral Resource were prepared by AMC Consultants (UK) Limited (AMC).
- In situ, dry metric tonnes have been reported using varying densities and slime cut-off per deposit.
- Material below 30% slimes for Halala, 20% slimes for Bimbi, Northeast Bimbi and Mpyupyu (dune and flat) and 25% slimes for Mposa (Main and North). All other deposits are stated using 30% slimes cut-off.
- Tonnages and grades have been rounded to reflect the relative uncertainty of the estimates and resultant confidence levels used to classify the estimates. As such, columns may not total.
- Estimates of the Mineral Resource have been constrained by ultimate pit shells to demonstrate RPEEE.
- Estimates are classified as Inferred according to JORC Code.

Table 1.2 Chilwa Heavy Mineral Sands Project – Mineral Resources at 1.5% THM as at 31 July 2022

Deposit	Volume (million m <sup>3</sup> )	Tonnes (million t)	Dry Density (t/m <sup>3</sup> )	Gangue (%)	Ilmenite (%)	Slimes (%)	THM (%)	Zircon (%)
Bimbi	1.5	2.6	1.7	0.7	4.3	15.3	5.3	0.3
Northeast Bimbi	3.5	6.0	1.7	0.4	2.2	15.9	2.7	0.1
Mposa (Main)	11.2	18.5	1.7	0.7	3.3	11.5	4.4	0.4
Mposa (North)	0.4	0.6	1.7	0.4	1.8	8.7	2.3	0.2
Mpyupyu (dune)	2.0	3.5	1.7	1.2	5.7	15.3	7.1	0.2
Mpyupyu (flat)	9.0	15.6	1.7	0.5	3.0	15.3	3.7	0.2
Nkotamo	0.1	0.2	1.5	1.1	3.0	28.3	4.2	0.2
Halala	5.9	8.7	1.5	0.9	2.6	9.7	3.7	0.2
Beacon	0.4	0.6	1.5	0.6	1.8	17.7	2.6	0.1
Namanja West	2.0	2.9	1.5	0.8	2.3	14.6	3.3	0.2
<b>Total</b>	<b>36.0</b>	<b>59.2</b>	<b>1.6</b>	<b>0.7</b>	<b>3.1</b>	<b>13.2</b>	<b>4.1</b>	<b>0.3</b>

- Estimates of the Mineral Resource were prepared by AMC Consultants (UK) Limited (AMC).
- In situ, dry metric tonnes have been reported using varying densities and slime cut-off per deposit.
- Material below 30% slimes for Halala, 20% slimes for Bimbi, Northeast Bimbi and Mpyupyu (dune and flat) and 25% slimes for Mposa (Main and North). All other deposits are a stated using 30% slimes cut-off.
- Tonnages and grades have been rounded to reflect the relative uncertainty of the estimates and resultant confidence levels used to classify the estimates. As such, columns may not total.
- Estimates of the Mineral Resource have been constrained by ultimate pit shells to demonstrate RPEEE.
- Estimates are classified as Inferred according to JORC Code.

Table 1.3 Chilwa Heavy Mineral Sands Project – Mineral Resources at 3.0% THM as at 31 July 2022

Deposit	Volume (million m <sup>3</sup> )	Tonnes (million t)	Dry Density (t/m <sup>3</sup> )	Gangue (%)	Ilmenite (%)	Slimes (%)	THM (%)	Zircon (%)
Bimbi	1.3	2.2	1.7	0.7	4.8	15.0	5.8	0.3
Northeast Bimbi	0.9	1.6	1.7	0.4	2.8	16.0	3.4	0.2
Mposa (Main)	6.9	11.4	1.7	0.9	4.3	10.2	5.7	0.6
Mposa (North)	0.1	0.1	1.7	0.6	2.8	9.9	3.8	0.4
Mpyupyu (dune)	1.9	3.2	1.7	1.3	6.0	15.1	7.5	0.2
Mpyupyu (flat)	5.6	9.7	1.7	0.6	3.8	16.0	4.6	0.2
Nkotamo	0.1	0.1	1.5	1.1	3.2	28.1	4.5	0.2
Halala	3.5	5.3	1.5	1.2	3.3	7.3	4.6	0.2
Beacon	0.1	0.1	1.5	0.9	2.4	15.5	3.5	0.2
Namanja West	1.1	1.7	1.5	1.0	2.7	13.1	3.9	0.2
<b>Total</b>	<b>21.5</b>	<b>35.5</b>	<b>1.6</b>	<b>0.9</b>	<b>4.0</b>	<b>12.4</b>	<b>5.2</b>	<b>0.3</b>

- Estimates of the Mineral Resource were prepared by AMC Consultants (UK) Limited (AMC).
- In situ, dry metric tonnes have been reported using varying densities and slime cut-off per deposit.
- Material below 30% slimes for Halala, 20% slimes for Bimbi, Northeast Bimbi and Mpyupyu (dune and flat) and 25% slimes for Mposa (Main and North). All other deposits are a stated using 30% slimes cut-off.
- Tonnages and grades have been rounded to reflect the relative uncertainty of the estimates and resultant confidence levels used to classify the estimates. As such, columns may not total.
- Estimates of the Mineral Resource have been constrained by ultimate pit shells to demonstrate RPEEE.
- Estimates are classified as Inferred according to JORC Code.

## 1.4 Standard of Reporting and Compliance

This IGR has been prepared in accordance with:

- The 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (the JORC Code).
- The 2015 Edition of the "Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets" (the VALMIN Code).

Exploration and internal technical studies, including an early-stage scoping study is considered by AMC to be sufficient to make estimates of Mineral Resources for the Project that can be classified and reported according to the JORC Code.

## 1.5 Tenure - Reliance on other experts

The author of this IGR is not an expert in EL management nor qualified to comment on the legal aspects of the ELs in the Republic of Malawi related to grant compliance with conditions and permitting and related matters. A reader should not rely on information in this IGR relating to the current ownership and legal standing of the ELs or any encumbrances whatsoever impacting on the EL. These matters are dealt with in a separate Solicitor's report on ELs contained within the Prospectus.

AMC has prepared this IGR on the understanding that the mineral assets held by MEIML are currently in good standing. AMC has not independently verified MEIML's legal tenure over its tenements. AMC is not qualified to make statements in this regard and has relied on information provided by MEIML.

AMC understands that MEIML engaged Singano Purshotam Law Consultants, a Malawian legal firm, which has its chambers in Blantyre, Malawi, to review the tenement status, which is included elsewhere in the Prospectus. AMC has had sight of the legal opinion provided to MEIML regarding the current ownership and legal standing of the ELs.

## 1.6 Statement of Independence

This IGR has been prepared by AMC, a privately-owned consulting company that has been operating for more than 35 years with its headquarters in Melbourne, Australia. AMC provides multidisciplinary services to a broad spectrum of clients across the global mining industry. Services are provided across all stages of the mining cycle from project generation to exploration, resource estimation, project evaluation, development studies, operations assistance, and corporate advice, such as valuations and independent technical documentation.

This IGR has been prepared by a team of consultants sourced from AMC's Maidenhead, Perth, and Melbourne offices. The individuals who have provided input to this IGR have extensive experience in the mining industry and are members in good standing of appropriate professional institutions. The consultants who prepared this IGR are specialists in the field of geology and exploration relating to HMS deposits.

The authors of this IGR are independent of CML, MEIML, or Luso Global Mining B.V. (LGM) (a party related to MEIML) or their directors, senior management and advisers and has no economic or beneficial interest (present or contingent) in the Project, its financing, or the outcome of the Prospectus. AMC is remunerated for this IGR by way of an agreed professional fee determined in accordance with standard commercial rates for professional services, based on time charges for work carried out.

The relationship between CML and AMC is solely one of professional association between client and independent consultant. Individuals employed by AMC are not officers, employees, or proposed officers of CML or any group, holding or associated companies of CML, MEIML, or LGM.

This IGR has been compiled based on information available up to and including the date of this IGR any statements and opinions are based on this date and could alter over time depending on exploration results, commodity prices and other relevant market factors.

AMC's fee for preparing this IGR is based on its nominal professional daily rates plus reimbursement of incidental expenses. The fees were agreed based on the complexity of the assignment, AMC's knowledge of the assets, and availability of data. The fee paid to AMC for this engagement was A\$50,000. The payment of this professional fee was not contingent upon the outcome of this IGR.

## 1.7 Competent Persons Qualifications, Declaration, and Consent

Mark Burnett has 29 years of experience in the mining industry and has had extensive exposure to the entire mining value chain, including exploration projects, scoping and feasibility studies, shaft sinking, operational mines, mergers, acquisitions, and asset disposals. Mark joined AMC in 2018 as a Principal Geologist, where his primary responsibilities are undertaking and managing technical geological works including MREs, technical reporting, business development, and client support in relation to exploration and production advice. Prior to joining AMC, Mark was a principal consultant and divisional manager (Applied Geosciences) for Snowden Mining Industry Consultants (Pty) Ltd (Snowden) in Johannesburg, South Africa.

Mark has a Master's Degree in Mineral Resource Management from the University of the Free State in South Africa, as well as an Honours Degree in Geology from the University of the Witwatersrand.

The information in this IGR that relates to exploration targets and MREs is based on information compiled by Mark Burnett, a Competent Person, who is a Fellow and Chartered Geologist (CGeol) of the Geological Society of London as well as being a registered European Chartered Geologist (EurGeol).

Mark Burnett possesses sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mark Burnett consents to the inclusion in this IGR of the matters based on his information in the form and context in which it appears.

## 1.8 Additional contributors to this IGR

The following persons also contributed to this IGR.

**Pier Federici, AMC Principal Mining Engineer:** Pier's expertise is in the mine planning and production areas, including all aspects of operations, mine planning, and scheduling – particularly in the mineral sands industry. Pier's mineral sands experience includes work at Eneabba (dredge and dry mine planning including optimization, production planning, and life-of-mine scheduling), Cooljarloo (dredge and dry mine planning, including optimization, an options study, a review of overburden mining, and the life-of-mine schedule), North Stradbroke Island (dredge and dozer trap mine planning including two life-of-mine schedules and a Hill of Value™ study), Iluka Murray Basin (Hill of Value™ study), Douglas (mine planning support, optimizations and supervised trial mining), Donald (mine planning assistance, reserve statements, optimizations designs, financial models, and schedules), Cylinder, Birthday Gift, and Stones Tank (optimizations and mine designs).

**Nicholas Szebor, AMC Principal Geologist:** Nick has more than 15 years of experience within the mineral industry, working in roles including consultancy and production. Nick has worked on numerous gold projects, primarily within Central Asia and Russia. His experience with gold mineralization includes the following deposit types: sedimentary-hosted, low-sulphide mesothermal, low- and high-temperature epithermal, orogenic, intrusion-related, copper-gold

porphyry, volcanogenic massive sulphide and iron oxide copper gold. His experience covers a range of commodities, geological settings, exploration and production environments, including underground and open-pit operations. This experience has been obtained across the mining lifecycle from early-stage exploration to production and mine closure. Nick has carried out Mineral Resource estimates to international reporting codes including the JORC Code.

A JORC Code Competent Person's Consent Form and Compliance Statement is attached to this IGR as Appendix B.

## 1.9 Warranties and indemnities

CML has warranted in writing to AMC that:

- Full, accurate and true disclosure of all material information has been made and that, to the best of its knowledge and understanding, such information is complete, accurate, and true.
- A draft copy of this IGR was provided to CML so that it could advise AMC of any material omissions, comment on the factual accuracy and assumptions made, and advise on any included information that is confidential.

As recommended by the VALMIN Code, CML provided AMC with an indemnity, under which AMC will be compensated for any liability and/or any additional work or expenditure resulting from any additional work required:

- Due to AMC's reliance on information provided by CML that is materially inaccurate or incomplete; and
- Relating to any consequential extension of workload through queries, questions or public hearings arising from this IGR.

## 1.10 Principle sources of information

The principal sources of information used by AMC to compile this IGR are technical reports and data variously compiled by AMC and/or CML, MEIML, or LGM for the purposes of internal review and as a resource for review by an independent consultant for the listing, CML and its staff or consultants, publicly available information, government reports and discussions with CML's technical and corporate management personnel.

## 1.11 Site visit

No site visit has been undertaken by AMC for the purposes of preparing this IGR.

The Competent Person is satisfied that a site visit is not required given that no activities are currently being undertaken on site and no exploration activities have been undertaken since 2015 when AMC undertook a site visit as part of the prior Mineral Resource estimation process.

## 1.12 Abbreviations and conventions

Throughout this IGR, references to dollars refer to Australian dollars designated as A\$ or United States dollars as US\$ or \$.

This IGR reports standard units in accordance with the international system of units, the Systeme Internationale (SI).

Table 1.4 provides a list of abbreviations and technical terms used in this IGR.

Table 1.4 List of abbreviations and technical terms

Abbreviation/Technical Term	Description
%	percentage
\$m	US dollars (millions)
µm	micron
3D	three-dimensional
AC	air core drilling utilizes high-pressure air and dual-walled rods to penetrate the ground and return a crushed sample to the surface through the inner tube and then through a sampling system. The ground is cut through with the use of a steel blade type bit.
AML	Allied Mineral Laboratories
AMC	AMC Consultants (UK) Limited
amphibole	amphibole is a group of inosilicate minerals, forming prism or needle like crystals
amphibolite	a metamorphic rock that contains amphibole, especially hornblende and actinolite, as well as plagioclase feldspar, but with little or no quartz
andalusite	an aluminium nesosilicate mineral with the chemical formula $Al_2SiO_5$
mamsl	metres above mean sea level
ASIC	Australian Securities and Investments Commission
ASX	Australian Securities Exchange
A\$	Australian dollar
Auger drilling	a drilling method that uses a large helical-shaped screw to extract material from the ground
BCM	bank cubic metre, a cubic metre of rock or material in situ before it is extracted
bulk sampling	bulk sampling is process of extracting a large, representative, sample of material from a mineralized target of sufficiently representative for metallurgical testwork purposes
C Geol	Chartered Geologist
carbonatite	an igneous rock that contains > 50% carbonate minerals
charnockitic	orthopyroxene-bearing quartz-feldspar rock formed at high-temperature and pressure, commonly found in granulite facies metamorphic regions
Chilwa Alkaline province	the Chilwa Alkaline province is a diverse suite of intrusive and extrusive alkaline igneous rocks
CML	Chilwa Minerals Ltd
colluvial	a general name for loose, unconsolidated sediments that have been deposited at the base of hillslopes by either rain wash, sheetwash, slow continuous downslope creep, or a variable combination of these processes.
CP	Competent Person
DTM	digital terrain model
EGM	Earth Gravity Model
EL	Exploration Licence
EMP	electron microprobe
ESIA	Environmental and Social Impact Assessment
ESS	Environmental and Social Sustainability
EurGeol	European Chartered Geologist
Fault	a planar fracture or discontinuity in a volume of rock across which there has been significant displacement.
finitization	a process whereby silica is removed from the host rock.
garnet	a group of silicate minerals that are used as gemstones and abrasives.
g/cm <sup>3</sup>	gram per cubic centimetre
GDP	gross domestic product
GSL	Geological Society of London
gneiss	gneiss is a high-grade metamorphic rock that displays distinct foliation, representing alternating layers composed of different minerals.

# Independent Geologist's Report

Chilwa Minerals Ltd

422008\_06

Abbreviation/Technical Term	Description
granulite	granulites are a class of high-grade metamorphic rocks that have experienced high-temperature and moderate-pressure metamorphism.
ha	hectare
HLS	heavy liquid separation
HM	heavy minerals (ilmenite, zircon, leucoxene, monazite and rutile)
HMS	heavy mineral sands (paleo dune, beach, or river deposits enriched in high density minerals such as ilmenite, zircon, leucoxene, monazite, and rutile).
hornblende	hornblende is a complex inosilicate series of minerals. It is not a recognized mineral, but the name is used as a general or field term, to refer to a dark amphibole.
ID	identification number
ID <sup>2</sup>	inverse distance to the power of two
IGR	Independent Geologist's Report
ilmenite	Fe TiO <sub>3</sub>
IP	induced polarization
Independent Valuation	the determination of what a mineralized asset is worth, undertaken by someone who is not an employee or has a relationship with the owners of the asset.
JORC Code	Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (2012)
Karoo Super group	the Karoo Supergroup is the most widespread stratigraphic unit in Africa south of the Kalahari Desert. The supergroup consists of a sequence of sedimentary units deposited approximately 201 million years ago.
kBCM	Bank Cubic Metre (thousand)
kg	kilogram
kg/t	kilograms/tonne
km <sup>2</sup>	square kilometres
kt	Tonnes (thousand)
lacustrine	lacustrine deposits are sedimentary rock formations which formed in the bottom of ancient lakes. A common characteristic of lacustrine deposits is that a river or stream channel has carried sediment into the basin.
leucoxene	FeTiO <sub>3</sub> .TiO <sub>2</sub>
Luso Global Mining B.V.	LGM
mL/s	litres per second
m	metres
Malawi	Republic of Malawi
MACRA	Malawi Communications Regulatory Authority
masl	metres above sea level
MEIML	Mota-Engil Investments (Malawi) Limited
MML	Millennium Mining Limited
monazite	(Ce,La,Th,Nd,Y)PO <sub>4</sub>
MRE	Mineral Resource estimate
NEB	Northeast Bimbi
nepheline	silica-undersaturated aluminosilicate, Na <sub>3</sub> KAl <sub>4</sub> Si <sub>4</sub> O <sub>16</sub> , that occurs in intrusive and volcanic rocks with low silica content.
orogeny	orogeny is the primary mechanism by which mountains are formed on continent.
pelitic	an aluminium-rich, metamorphic rock formed by the metamorphism of clay-rich sedimentary rocks.
potassic	an alteration process whereby new potassium -feldspar and/or biotite is formed.
ppm	parts per million
Project	Chilwa Heavy Mineral Sands Project
pyrochlore	(Na,Ca) <sub>22</sub> O <sub>6</sub> (OH,F)

Abbreviation/Technical Term	Description
Ramsar	Ramsar identifies wetlands of international importance, especially those providing waterfowl habitat.
REE	Rare Earth Elements
RF	Revenue Factor
Risk Assessment	a determination (qualitatively as well as quantitative) of a projects chance of failure or loss.
RPEEE	reasonable prospects for eventual economic extraction as referred to in the JORC Code.
rutile	TiO <sub>2</sub>
SG	specific gravities
syenite	a coarse-grained intrusive igneous rock with a general composition similar to that of granite, but deficient in quartz.
t/m <sup>3</sup>	tonnes per cubic metre
THM	total heavy minerals
QA/QC	quality assurance and quality control
Quaternary	the youngest period in Earth's history – circa the past 2.6 million years.
REE	Rare Earth Elements are a set of seventeen metallic elements. These include the fifteen lanthanides on the periodic table plus scandium and yttrium.
Royalty	a right to receive payment based on a percentage of the minerals or other products produced at a mine or of the revenues or profits generated from the sale of those minerals or other products at a mine.
share sale agreement	a sales agreement used to transfer and assign ownership of shares of stock in a corporation or company.
SI	Systeme Internationale
Snowden	Snowden Mining Industry Consultants (Pty) Ltd
sonic core drilling	sonic core drilling is an advanced form of drilling which employs the use of high-frequency, resonant energy to advance a core barrel or casing into subsurface formations.
special-purpose vehicle	a subsidiary company that is formed to undertake a specific business purpose or activity
SS	scoping study
Tate	Tate Minerals
Tertiary	the first period of the Cenozoic era, 66 million to 2.6 million years ago.
US\$	United States dollar
UTM	Universal Transverse Mercator
VALMIN	Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets (2015)
WCP	wet concentrator (plant)
WGS84	World Geodetic System
zircon	ZrSiO <sub>4</sub>



## 2 Republic of Malawi

The Republic of Malawi (Malawi) is a land-locked country located in south-eastern Africa. As shown in Figure 2.1, Malawi is surrounded by the Republic of Zambia (Zambia) to the west, the United Republic of Tanzania (Tanzania) to the north and north-east and the Republic of Mozambique (Mozambique) to the east, south, and south-west (Wikipedia, 2022).

Figure 2.1 Location of the Republic of Malawi



Source:  
[https://www.researchgate.net/publication/332816372\\_Modelling\\_of\\_climate\\_conditions\\_in\\_forest\\_vegetation\\_zones\\_in\\_Malawi/figures?lo=1](https://www.researchgate.net/publication/332816372_Modelling_of_climate_conditions_in_forest_vegetation_zones_in_Malawi/figures?lo=1)

Malawi is composed of three regions (Northern, Central, and Southern regions), which are divided into 28 districts. Malawi's capital is Lilongwe, and its commercial centre is Blantyre (CIA, 2022).

Malawi has a total land area of 118,480 km<sup>2</sup> having an average elevation of 779 metres above mean sea level (mamsl). The eastern limb of the Great Rift Valley (East African Rift) runs through Malawi from north to south, with Lake Malawi (also known as Lake Nyasa in Tanzania and Lago Niassa in Mozambique) forming a common border between Malawi, Tanzania, and Mozambique.

### 2.1 Geography

Malawi's topography consists of plateaus broken by large hills. To the west of the Great Rift Valley, plateaus occur at elevations ranging from 910 to 1,220 mamsl. The Shire Highlands (600 to 1,600 mamsl) occur to the south of Lake Malawi (Country Reports, 2022).

## 2.2 Climate

Malawi has a sub-tropical climate which is relatively dry and strongly seasonal.

A cool, dry, winter season occurs from May to August with daytime temperatures ranging from 17°C to 27°C. September to October is generally dry, with daytime temperatures ranging from 25°C to 37°C. The rainy season is from December to March (Ministry of Forestry and Natural Resources, 2022).

## 2.3 Economics

Malawi is one of the world's least developed countries, with 85% of the population living in rural areas practicing subsistence agriculture (Tools for Self-Reliance, 2016). The Malawian economy is strongly dependant on agriculture, which accounts for 30% of the gross domestic product and 90% of the country's export revenues. The Malawian government would like to move the country away from its dependence on agriculture and has identified six major economic growth sectors:

- Agriculture.
- Manufacturing.
- Energy (bio-energy, mobile electricity).
- Tourism (ecolodges).
- Infrastructure (wastewater services and fibre-optic cables).
- Mining.

As part of this change, Malawi updated its mining law in 2018 to actively encourage foreign investment (ICLG, 2022).

## 2.4 Infrastructure

Malawi has 31 airports, two of which are international airports (Kamuzu International Airport, LLW, at Lilongwe and Chileka International Airport, BLZ, at Blantyre). Seven hundred and ninety-seven kilometres (km) of narrow-gauge railway line, and approximately 25,000 km of road in various conditions form the basis of terrestrial transport in the country (Wikipedia, 2022; CIA, 2022).

As of 2022, there were 10.2 million mobile phone connections in Malawi and 4.0 million Internet users.

Radio, television, and postal services in Malawi are regulated by the Malawi Communications Regulatory Authority.

## 2.5 Demographics

Malawi has a population of more than 18 million, with a growth rate of 3.3% per annum, according to 2018 estimates. Malawi's population is made up of the Chewa, Tumbuka, Yao, Lomwe, Sena, Tonga, Ngoni, and Ngonde native ethnic groups, as well Chinese and Europeans (CIA, 2022).

The median age is currently 16.8 years (male: 16.7 years; female: 16.9 years).

## 2.6 Language

The official language of Malawi is English, with other major languages being spoken including Chichewa (57%), Chinyanja (12.8%), Chiyao (10.1%), and Chitumbuka (9.5%) (CIA, 2022).

## 2.7 Education

In Malawi, literacy is defined as anyone over the age of 15 that can read and write. Currently, Malawi has a literacy rate of 62.1% for the total population, with males demonstrating a higher degree of literacy (69.8%) than females (55.2%) (CIA, 2022).

## 3 Mines and Minerals Act (2019)

The Mines and Minerals Act (2019), gazetted on 15 February 2019 (Act number 8 of 2019), is designed to attract investment into mining in accordance with Malawi's intention of reducing the country's dependency in agriculture.

Mineral rights are vested in the state, granting of licences is based on the recommendations of the Mineral Resources Committee, which advises the Minister of Mining.

A summary of the various licences is provided below. This summary is not exhaustive, and the reader is referred to the Mines and Minerals Act (2019) and, for additional detail, refer to <http://extwprlegs1.fao.org/docs/pdf/mlw199882.pdf>

### 3.1 Non-exclusive prospecting licence

A non-exclusive prospecting licence must be applied for by a Malawian citizen or a Malawian registered company 100% owned by Malawians. A maximum of two licences can be held and will last for 12 months. This may be extended for a year.

### 3.2 Reconnaissance licence

Reconnaissance licences may be granted to a duly incorporated company, or a company listed as a foreign company. A reconnaissance licence is granted for a 12-month period and may be extended by an additional 12 months. The term of the licence commencing on the date that it is granted on. The maximum size of the licence area is 100 km<sup>2</sup> and minimum size of one hectare. The holder of a reconnaissance licence may not, however, undertake any drilling, trenching, or other excavation that substantially disturbs the land surface. Non-invasive techniques such as surface samples, rock chip and stream sediment sampling, are allowed along with geophysical methods that are non-invasive.

### 3.3 Exploration licence (EL)

An EL may be granted to duly incorporated companies or companies listed as a foreign company. The initial term of the EL is for three years, commencing on the date when the licence is granted. The licence may be extended on not more than two occasions. On extension the licence area must be reduced by at least half. If the area falls below 25 km<sup>2</sup>, the applicant may request an area of up to 25 km<sup>2</sup>.

### 3.4 Retention licence

A retention licence may be granted to duly incorporated companies or companies registered as an external company that have the technical competence and financial ability to fulfil the licence obligations. A retention licence may be granted if it has been demonstrated that the applicant has located a mineral deposit which is of commercial significance; however, the mineral deposit cannot justifiably be mined at the present time, utilizing proven technology, due to:

- Adverse market conditions.
- Adverse financial conditions.
- Adverse infrastructural conditions.
- A feasibility study has to be completed.
- Delays in government approvals.
- Delay in resettlement or compensation payments.
- Exploration work has progressed as far as it can go, and a retention licence is required.

A retention licence is valid for five years, commencing from the date of issue and may not be extended.

### 3.5 Medium- and large-scale mining licence

The Minister of Mines may grant a medium- or large-scale mining licence to:

- A company duly incorporated under the Companies Act.
- A company that has the technical competence and the finances to fulfil the licensing obligations.

The Government may elect to acquire a free ownership equity interest in the company of up to 10%.

A large-scale mining licence is required if:

- Alluvial operations: where annual throughput exceeds 1 million cubic metres/year.
- Underground: where the annual combined run-of-mine ore and waste production is more than 500,000 tonnes per year (waste material not exiting the mine is to be excluded).
- Opencast: where the annual combined run-of-mine ore, rock, waste, and overburden production is more than five million tonnes per annum.

Or:

- Following the completion of construction, the operation employs or contracts more than 1,000 employees within Malawi on a typical working day.
- If capital investment over the first ten years of mining exceeds US\$250 million.

### 3.6 Small-scale mining licence

Small-scale mining licences may be granted to Malawian citizens or to a mining co-operative society, or a mining company incorporated in Malawi that is 100% owned by Malawian citizens. The licence is valid for an initial period of two years and may be extended for further period, not exceeding two years at a time. The area over which a small-scale mining licence is issued may not be larger than two hectares and not less than one hectare.

### 3.7 Taxation and royalties

The current tax rate for mining companies in Malawi is 30% of taxable profit. An additional 5% is charged in respect of companies not incorporated in Malawi. An additional resource rent tax of 10% is levied on profits after tax if the company's rate of return exceeds 20%.

Royalties will be charged on the export of mineral consignments and currently appear to be negotiable at the discretion of the Minister of Mines.

## 4 Geology and mineralization

The geology of Malawi (Figure 4.1) is broadly grouped into four main lithological units: the Basement Complex, the Karoo Super group, Tertiary to Quaternary sedimentary deposits and the Chilwa Alkaline province. These units have in turn been affected by three major phases of deformation and metamorphism: the Irumide, Ubendian, and Pan-African orogenys.

### 4.1 Basement Complex

The Basement Complex occupies 85% of Malawi and comprises of hornblende, biotite amphibolites, gneisses, and granulites of the Mozambican orogenic belt. In addition, quartzites, calc-silicate granulites, pelitic schists, marbles, granitic and pegmatitic gneisses, and nepheline gneisses occur in the Basement Complex. Economic minerals associated with the Basement Complex includes apatite, asbestos, chromite, copper, corundum, gemstones (precious and semiprecious), gold, graphite, kyanite, magnesite, marble, nickel, platinum, pyrite, talc, and vermiculite (Malunga, 2014).

### 4.2 Post Basement sediments

#### 4.2.1 Karoo Supergroup

The Karoo Supergroup is composed of Permian to Upper Jurassic sedimentary rocks which conformably to uncomfortably overly the Basement complex. Sedimentary rocks of the Karoo Supergroup are mainly found in the north and south of Malawi. In northern Malawi, the Karoo Supergroup strata are preserved in north-south trending basins and graben troughs, displaying both unconformable and faulted relationships to the underlying Basement Complex rocks (Malunga, 2014).

#### 4.2.2 Upper Jurassic Quaternary Sediments

Upper Jurassic sediments occur unconformably on the Basement Complex in Karonga and are confined to the rift system that parallels the shore of Lake Malawi. The Lupata series are characterized by pebble conglomerates, coarse sandstones, sandy shales, and marls lying unconformable over Karoo Supergroup rocks (Malunga, 2014).

Lacustrine and colluvial deposits occur parallel to the shore of Lake Malawi and underlie the plains between the Lilongwe and Mzimba districts. These rocks consist principally of buff-coloured grits, sandstones, and discontinuous red conglomerates (Malunga, 2014).

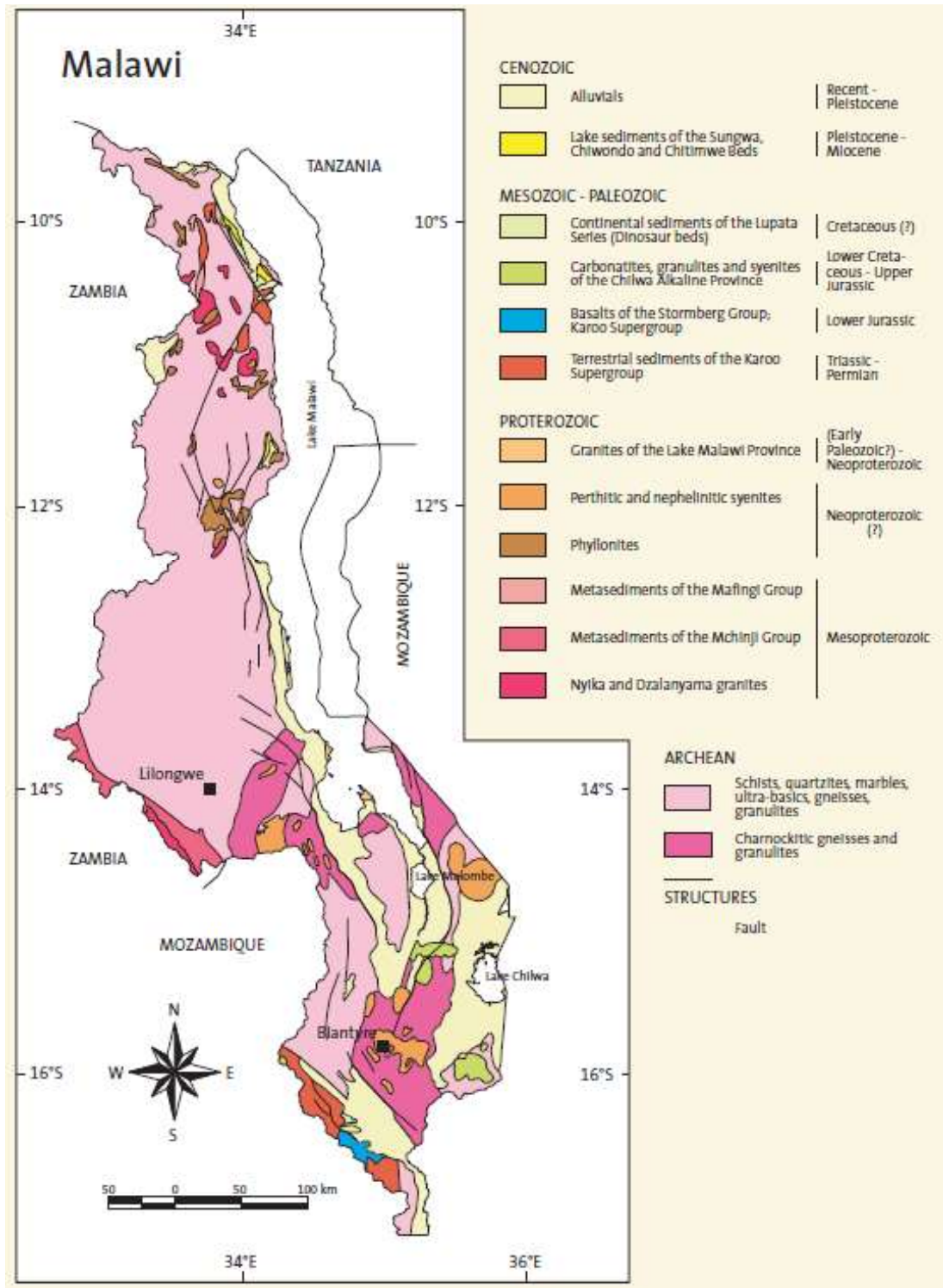
#### 4.2.3 Chilwa Alkaline Province

The Chilwa Alkaline Province consists of nepheline syenite plutons and volcanic vents filled with carbonatite, agglomerate, as well as a varied suite of alkaline dyke rocks (Malunga, 2014).

#### 4.2.4 Recent Sediments

These are represented by Quaternary age lacustrine and alluvial deposits. They occur in the north along the western shore of Lake Malawi and in the Vwaza Basin along the Zambian border (Malunga, 2014).

Figure 4.1 Simplified geological map of Malawi



### 4.3 Economic geology of Malawi

Malawi has several mineral deposits that have the potential for eventual economic exploitation, including apatite, bauxite, coal, gemstones, graphite, HMS, limestone and Rare Earth Elements (REE) (Malunga, 2014).



## 5 Mineralization and exploration models

### 5.1 Heavy mineral sands

Heavy minerals (HM) in Table 5.1 is the term given to a group of minerals commonly found and mined together from water or wind concentrated deposits. The principal valuable heavy minerals include ilmenite ( $\text{FeTiO}_3$ ), leucoxene ( $\text{Fe}_2\text{TiO}_3 \cdot \text{TiO}_9$ ), rutile ( $\text{TiO}_2$ ), zircon ( $\text{ZrSiO}_4$ ), and monazite ( $(\text{Ce,La,Th,Nd,Y})\text{PO}_4$ ).

Table 5.1 Heavy minerals group

Mineral	Valuable	Magnetic Susceptibility	Electrical Conductivity	SG	Chemical Formula
Ilmenite	Yes	High	High	4.5-5.0	$\text{FeTiO}_3$
Rutile	Yes	Low	High	4.2-4.3	$\text{TiO}_2$
Zircon	Yes	Low	Low	4.7	$\text{ZrSiO}_4$
Leucoxene	Yes	Semi	High	3.5-4.1	$\text{Fe}_2\text{TiO}_3 \cdot \text{TiO}_9$
Monazite	Possibly	Semi	Low	4.9-5.3	$(\text{Ce,La,Th,Nd,Y})\text{PO}_4$

Source: Elsner (undated).

The minerals that are mined from HMS deposits all have high density with specific gravities (SG) greater than  $2.85 \text{ g/cm}^3$  (SG of sand) allowing them to be concentrated by natural processes, such as storms and wave action. Most HMS deposits that are currently being exploited are found in unconsolidated, paleo-shorelines generally inland from the present shoreline.

The mineral assemblage of HMS deposits is generally considered to be reflective of the local or regional source rock(s); however, variations both at a local- and regional-scale may occur. The HM that are commercially extracted are generally found in two types of HMS deposit:

- Beach placers (strand lines) created by water movement.
- Dune placers created by wind movement.

The concentration of HM occurs in varying proportions within each HMS deposit. Deposits containing high-rutile content are more valuable due to their higher titanium content. Deposits containing high-zircon content are also valuable, as zircon is more valuable than ilmenite.

Most HMS deposits that are currently being mined have an average HM grade of 2.0% to 6.0% HM, with HM occurring typically in the following proportions:

- Ilmenite: 55% to 60%.
- Rutile: 5% to 10%.
- Zircon: 3% to 5%.
- Trash minerals, commonly regarded as being andalusite, quartz, magnetite, garnet, chromite, and kyanite): 25% to 40% (note: accessory minerals such as garnet, amphibole, and quartz are present at the Project. The potential for their extraction has not been determined as yet, neither have they been estimated or valued at this stage of the Project development).

Grain size of the valuable heavy minerals (VHM) excluding the trash minerals is important for process recovery as very fine-grained HMS deposits cannot be easily exploited.

### 5.2 Formation of HMS deposits

Heavy minerals are found in igneous rock; rutile and ilmenite are sourced from magnesium and iron-rich rocks such as gneisses, dolerites and gabbros; with zircon being sourced from granitic hosts. These minerals are released from their host rocks during weathering and are transported

to the ocean, where they are concentrated on the beach, via reworking and winnowing caused by wave and current action.

Wave energy is a critical factor for the development of economic HMS deposits and is dependent on three principal factors:

- Water depth.
- Wind strength.
- The distance over which the wind blows (fetch).

The concentration of HM in HMS deposits is dependent on the minerals SG as well as on its absolute weight; particle size is an important factor in HM concentration processes.

### **5.3 Mineralization and exploration model**

Regional exploration for HMS deposits can be undertaken using geochemistry and geophysical techniques.

#### **Geochemical**

Geochemical indicators include:

- Anomalous concentrations of economic or related elements in sediments or favourable stratigraphy.

#### **Geophysical techniques include:**

- Magnetic, gravity, and seismic surveys used to assist in mapping paleo-topography and outline paleo-channels.
- Induced polarization (IP) and/or resistivity surveys used to locate conductive disseminated mineralization (e.g., presence of ilmenite).
- Electromagnetic surveys that would assist in detecting conductive material.
- Ground-penetrating radar to determine the location of hardpan and bedrock.
- Radiometric surveys to locate radioactive heavy-mineral concentrations. Historic and recent exploration (e.g., presence of monzonite).

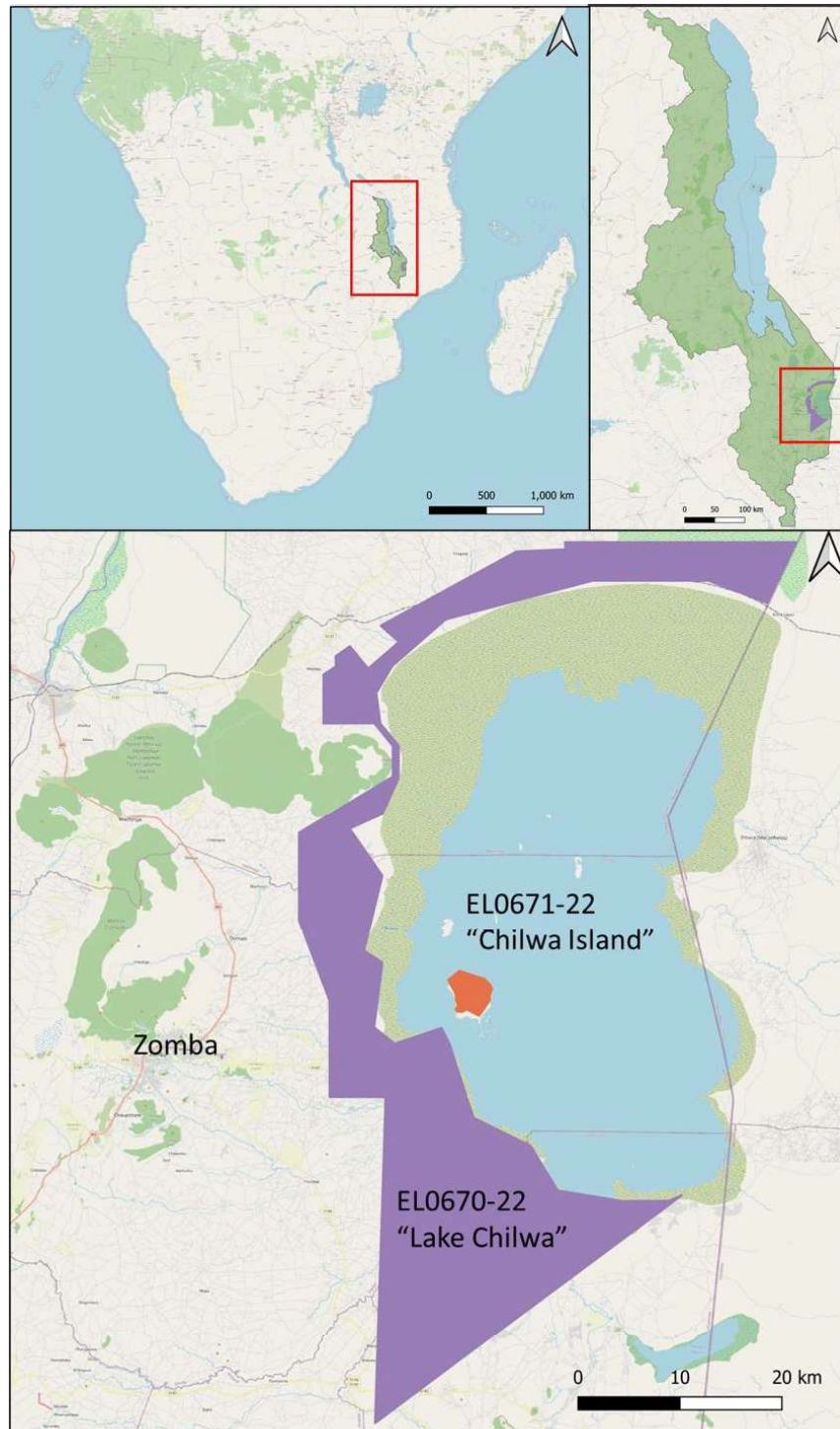


## 6 Chilwa Heavy Mineral Sands Project

### 6.1 Location

The Project is located around the western and northern shores of Lake Chilwa, southern Malawi (Figure 6.1).

Figure 6.1 Location of the Chilwa Heavy Mineral Sands Project



Source: CML, 2022.

## 6.2 Licence and tenure

The Lake Chilwa EL covers a thin strip of land along the shore of Lake Chilwa, between the shoreline and the first break of slope in the north and north-east. The EL extends and widens to the south, as well as extending along the south-eastern shoreline of Lake Chilwa.

The Chilwa Island EL includes Chilwa Island in its entirety. Chilwa Island is located approximately 2 km from the lakeside village of Mchenga.

The licence boundary co-ordinates are presented in Table 6.1 and Table 6.2, grid system WGS84.

Table 6.1 Licence co-ordinate extents for Lake Chilwa (EL0670/22)

POINT	EASTING	NORTHING	LICENCE AREA
1	771062	8261346	EL0670-22 LAKE CHILWA
2	772096	8293398	EL0670-22 LAKE CHILWA
3	766600	8293400	EL0670-22 LAKE CHILWA
4	766600	8303000	EL0670-22 LAKE CHILWA
5	763600	8310800	EL0670-22 LAKE CHILWA
6	763600	8319400	EL0670-22 LAKE CHILWA
7	772800	8325000	EL0670-22 LAKE CHILWA
8	772800	8328000	EL0670-22 LAKE CHILWA
9	771000	8330200	EL0670-22 LAKE CHILWA
10	766000	8330200	EL0670-22 LAKE CHILWA
11	766000	8335000	EL0670-22 LAKE CHILWA
12	767200	8335800	EL0670-22 LAKE CHILWA
13	767200	8336800	EL0670-22 LAKE CHILWA
14	766600	8337800	EL0670-22 LAKE CHILWA
15	770400	8335600	EL0670-22 LAKE CHILWA
16	773400	8338200	EL0670-22 LAKE CHILWA
17	771600	8339800	EL0670-22 LAKE CHILWA
18	784917	8347080	EL0670-22 LAKE CHILWA
19	789743	8347306	EL0670-22 LAKE CHILWA
20	789688	8348000	EL0670-22 LAKE CHILWA
21	812376	8348000	EL0670-22 LAKE CHILWA
22	812054	8347311	EL0670-22 LAKE CHILWA
23	811944	8347087	EL0670-22 LAKE CHILWA
24	811879	8346951	EL0670-22 LAKE CHILWA
25	811815	8346816	EL0670-22 LAKE CHILWA
26	811586	8346315	EL0670-22 LAKE CHILWA
27	811523	8346180	EL0670-22 LAKE CHILWA
28	811435	8346000	EL0670-22 LAKE CHILWA
29	811024	8345143	EL0670-22 LAKE CHILWA
30	810855	8344781	EL0670-22 LAKE CHILWA
31	810404	8343833	EL0670-22 LAKE CHILWA
32	810321	8343651	EL0670-22 LAKE CHILWA
33	809796	8342516	EL0670-22 LAKE CHILWA
34	809752	8342426	EL0670-22 LAKE CHILWA
35	809729	8342382	EL0670-22 LAKE CHILWA

<b>POINT</b>	<b>EASTING</b>	<b>NORTHING</b>	<b>LICENCE AREA</b>
36	809657	8342250	EL0670-22 LAKE CHILWA
37	809634	8342206	EL0670-22 LAKE CHILWA
38	809612	8342161	EL0670-22 LAKE CHILWA
39	809593	8342115	EL0670-22 LAKE CHILWA
40	809576	8342068	EL0670-22 LAKE CHILWA
41	809558	8342016	EL0670-22 LAKE CHILWA
42	803800	8344200	EL0670-22 LAKE CHILWA
43	792400	8344200	EL0670-22 LAKE CHILWA
44	778000	8340400	EL0670-22 LAKE CHILWA
45	772800	8336000	EL0670-22 LAKE CHILWA
46	771200	8333200	EL0670-22 LAKE CHILWA
47	771600	8330200	EL0670-22 LAKE CHILWA
48	773400	8328000	EL0670-22 LAKE CHILWA
49	773400	8325000	EL0670-22 LAKE CHILWA
50	771800	8321400	EL0670-22 LAKE CHILWA
51	768600	8319800	EL0670-22 LAKE CHILWA
52	771800	8315200	EL0670-22 LAKE CHILWA
53	770000	8307800	EL0670-22 LAKE CHILWA
54	771800	8306600	EL0670-22 LAKE CHILWA
55	771000	8300400	EL0670-22 LAKE CHILWA
56	773000	8298800	EL0670-22 LAKE CHILWA
57	777600	8300200	EL0670-22 LAKE CHILWA
58	778400	8298600	EL0670-22 LAKE CHILWA
59	780727	8291396	EL0670-22 LAKE CHILWA
60	786349	8288618	EL0670-22 LAKE CHILWA
61	788995	8284253	EL0670-22 LAKE CHILWA
62	795272	8283208	EL0670-22 LAKE CHILWA
63	801217	8283810	EL0670-22 LAKE CHILWA
64	799874	8282782	EL0670-22 LAKE CHILWA
65	799874	8283224	EL0670-22 LAKE CHILWA

Source: CML, 2022.

Table 6.2 Licence co-ordinate extents for Chilwa Island (EL0671/22)

POINT	EASTING	NORTHING	LICENCE AREA
A	778194	8304902	EL0671-22 CHILWA ISLAND
B	779337	8305838	EL0671-22 CHILWA ISLAND
C	781796	8305043	EL0671-22 CHILWA ISLAND
D	782373	8304510	EL0671-22 CHILWA ISLAND
E	782590	8304031	EL0671-22 CHILWA ISLAND
F	782384	8303509	EL0671-22 CHILWA ISLAND
G	782384	8302900	EL0671-22 CHILWA ISLAND
H	781296	8301322	EL0671-22 CHILWA ISLAND
I	780066	8301953	EL0671-22 CHILWA ISLAND
J	779609	8301703	EL0671-22 CHILWA ISLAND
K	779076	8301779	EL0671-22 CHILWA ISLAND
L	778934	8301996	EL0671-22 CHILWA ISLAND
M	779174	8302377	EL0671-22 CHILWA ISLAND
N	778956	8302932	EL0671-22 CHILWA ISLAND
O	778956	8303455	EL0671-22 CHILWA ISLAND

**6.3 Lake Chilwa (EL0670/22)**

Lake Chilwa is in Southern Malawi, on the eastern border with Mozambique. The town of Zomba is located 20 km to the west of the EL, and the commercial capital of Blantyre, is located 80 km to the south-west. (Figure 6.2).

Figure 6.2 Regional image of southern Malawi showing the location of Lake Chilwa



Source: Google Earth.

Lake Chilwa measures 40 km from north-to-south and 30 km from east-to-west and is a shallow, saline body of water surrounded by dense swamps and marshes. A narrow belt of arable grassland surrounds the lake, which contains the HMS deposits that are being targeted by CML.

The lake is a Ramsar designated Wetland, however the EL is contained in a zone of arable grass along the western and northern shore of Lake Malawi.

Access to the northern and western shore of Lake Chilwa is relatively easy in the dry season, however, can be problematic during the wet months. The area is densely populated, and subsistence farming is widespread. Two large rice-growing projects occur in the area, one towards the south-east of Mposa and the second to the south of Mpyupyu.

## **6.4 Geology of the Lake Chilwa area and associated HMS deposits**

The regional geology and structural evolution of the larger area surrounding Lake Chilwa area has had a significant impact on the formation of the lake as well as the deposition and preservation of the HMS deposits that are present in the EL.

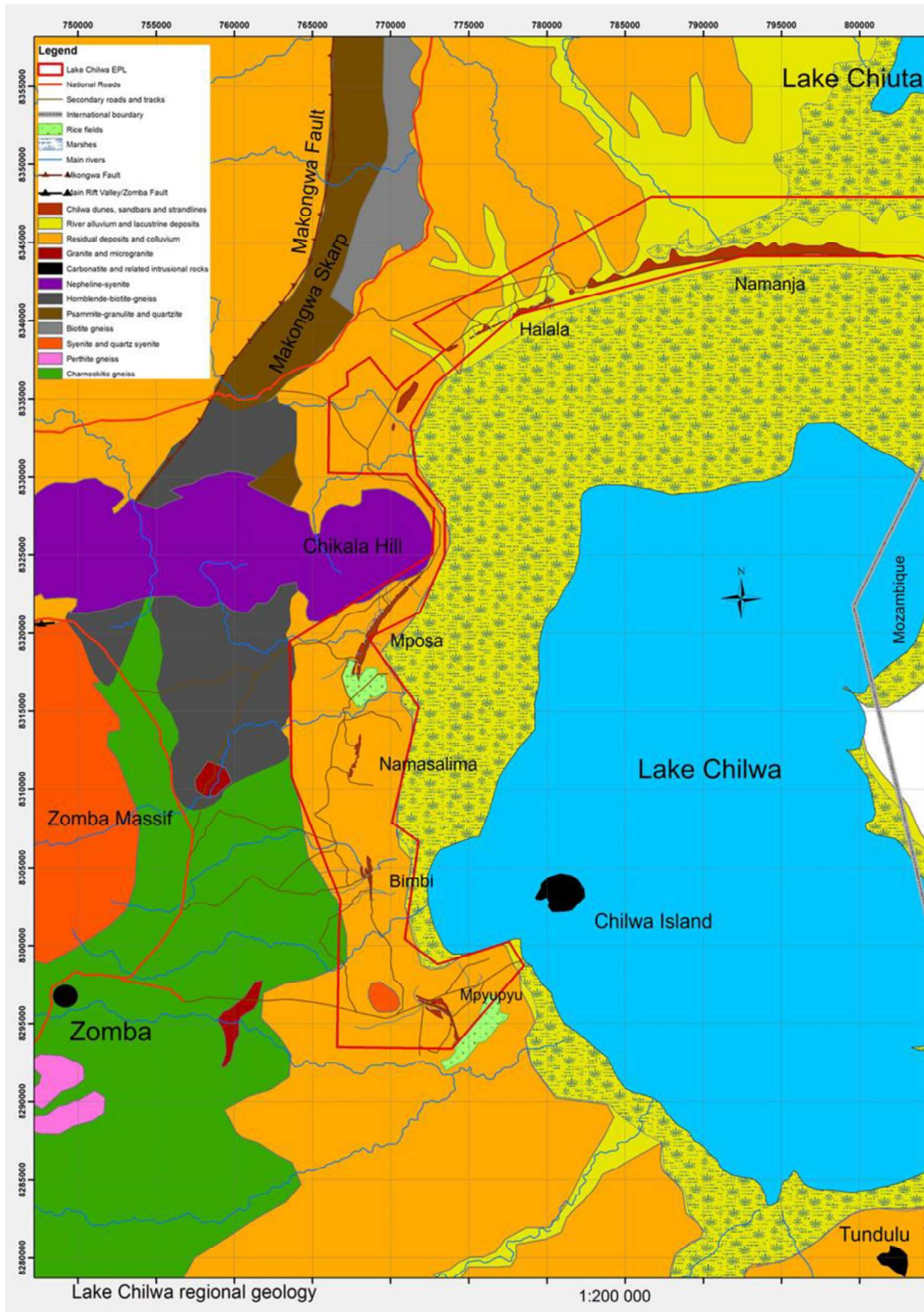
The oldest rocks in the Lake Chilwa area are Pre-Cambrian Age Basement Complex paragneisses and orthogneisses. These rocks outcrop over a large part of the Lake Chilwa area. Basement Complex gneisses mainly consist of charnockitic gneiss, hornblende-biotite gneiss, and biotite gneiss. Granulite and quartzite are present to the north of Lake Chilwa.

Most of the rocks are stated as containing ilmenite and zircon as accessory minerals where the ilmenite is mostly ubiquitous (Geological Survey Department of Malawi, Bulletin no 16. 1965). Some of the biotite gneisses are described as being garnetiferous.

Pre-Karoo igneous rocks present in the area include the Domasi biotite-granite, as well as microgranites, that outcrop in the Domasi River. These are stated as having abundant titanomagnetite and ilmenite as accessory minerals (Geological Survey Department of Malawi, Bulletin No. 16. 1965). A simplified geological map of the Lake Chilwa is presented in Figure 6.3.



Figure 6.3 Regional geology of the Lake Chilwa/Zomba area



Source: MEIML, 2015.

Jurassic and Cretaceous age alkaline intrusive rocks of the Chilwa Alkaline Province account for a large proportion of the rocks in the Lake Chilwa area. These rocks form the Zomba Massive (Malosa Mountain) to the west of Lake Chilwa, the Mulanje Massive to the south of the lake, as well as the ring complexes of the Mongolowe/Chaone/Chikala Hills to the north-west. The rocks consist mainly of nepheline syenite, quartz syenite, and nepheline. Other Chilwa Alkaline Province intrusive include the Mpyupyu Hill syenite, and the carbonatite complexes of Chilwa Island and Tundulu. These rocks all contain zircon and ilmenite as major accessory minerals.

The intrusion of the Chilwa Alkaline Province rocks was followed by the movement along the Rift Valley Fault and the subsequent erosion and peneplanation of the valley floor during the late Cretaceous and early Tertiary Periods.

The area around Lake Chilwa consists of residual and colluvial deposits, as well as several ages of lacustrine and beach deposits, including silts, clays, and sand. These deposits are all associated with the formation, evolution, and associated depositional environments of Lake Chilwa.

### 6.5 Lake Chilwa terraces and strandlines

Several terraces and raised beach levels can be identified around Lake Chilwa, with specific terraces being associated with HMS mineralization. Details of the primary terraces of interest are presented in Table 6.3.

Table 6.3 Summary of Lake Chilwa terraces and associated known HMS occurrences

AMSL (m)	Age	Comments	Deposit
652	Late Pleistocene	Terrace and raised beach not well-developed.	None
637		Better defined, No deposition in Lake Chilwa. Lake Chilwa and Lake Chiuta still connected.	None
631	Early Holocene	Well-developed terrace and raised beach along the western shore, steady state period. Lakes Lake Chilwa and Chiuta separate.	North shore deposits of Halala (includes Nkotamo, Halala, Beacon, and Namanja West) West shore deposits: Mposa, Bimbi, and Mpyupyu
628		Water levels drop due to a dry climatic period, ongoing deposition and winnowing by wind, current, and wave action.	Unknown
623		Silty deposits, material potentially supplied and reworked from the 631 mamsl beach deposits	Bimbi East and Mpyupyu East

Source: MEIML, 2016.

Note: The above Table does not include the known HMS anomalies from historical exploration activities.

### 6.6 Formation of the HMS deposits of Lake Chilwa

There is a difference both in deposit morphology and HMS heavy mineral assembly between the north (Halala and Nemanja) and the western shore deposits (Mpyupyu, Bimbi, and Mposa). This is attributed to the differences in the depositional environment as well as sediment supply to the different areas.

#### 6.6.1 Sediment and HM supply

The sediment as well as the HM that form the known HMS deposits in the Lake Chilwa area are locally sourced and derived. The gneisses of the Basement Complex contain varying concentrations of ilmenite, zircon, and garnet. Younger rocks do not contain high concentrations of these minerals and it is assumed that the basement rocks are the primary source of HM for the Lake Chilwa deposits, with the younger rocks being the source of the amphiboles, garnets, and feldspar present in the HMS deposits.

The influence of the source rock on the mineralogical content and characteristics of the HMS deposits is demonstrated in Table 6.4.

Table 6.4 Comparison between the Halala and Mpyupyu deposits

Mineral	Halala	Mpyupyu
Garnet	11-17%	3%
Amphibole	12%	3 to 7%
Ilmenite and altered ilmenite	65%	80-86%
Zircon (relative)	1x	2x
Quartz	72%	60%
Feldspar	22%	30%
Pyroxene	6%	10%
Hematite and Magnetite	Present	Absent
Monzonite(relative)	Low	High

Source: MEIML, 2016.

### 6.6.2 Sediment transport and deposition

The sediments and HM that form the Lake Chilwa HMS deposits were eroded and transported from the regional rock masses by rivers. Lancaster (1981) postulated that; a north-flowing, longshore current, developed along the western shore of Lake Chilwa during the period when the 631 mamsl terrace was being formed. The longshore current transported sediments northwards, with fine material being winnowed out by wave action. Sediments deposited on the beaches were constantly reworked and matured through a combination of the longshore current, wave and wind action, as well as fluctuating lake levels.

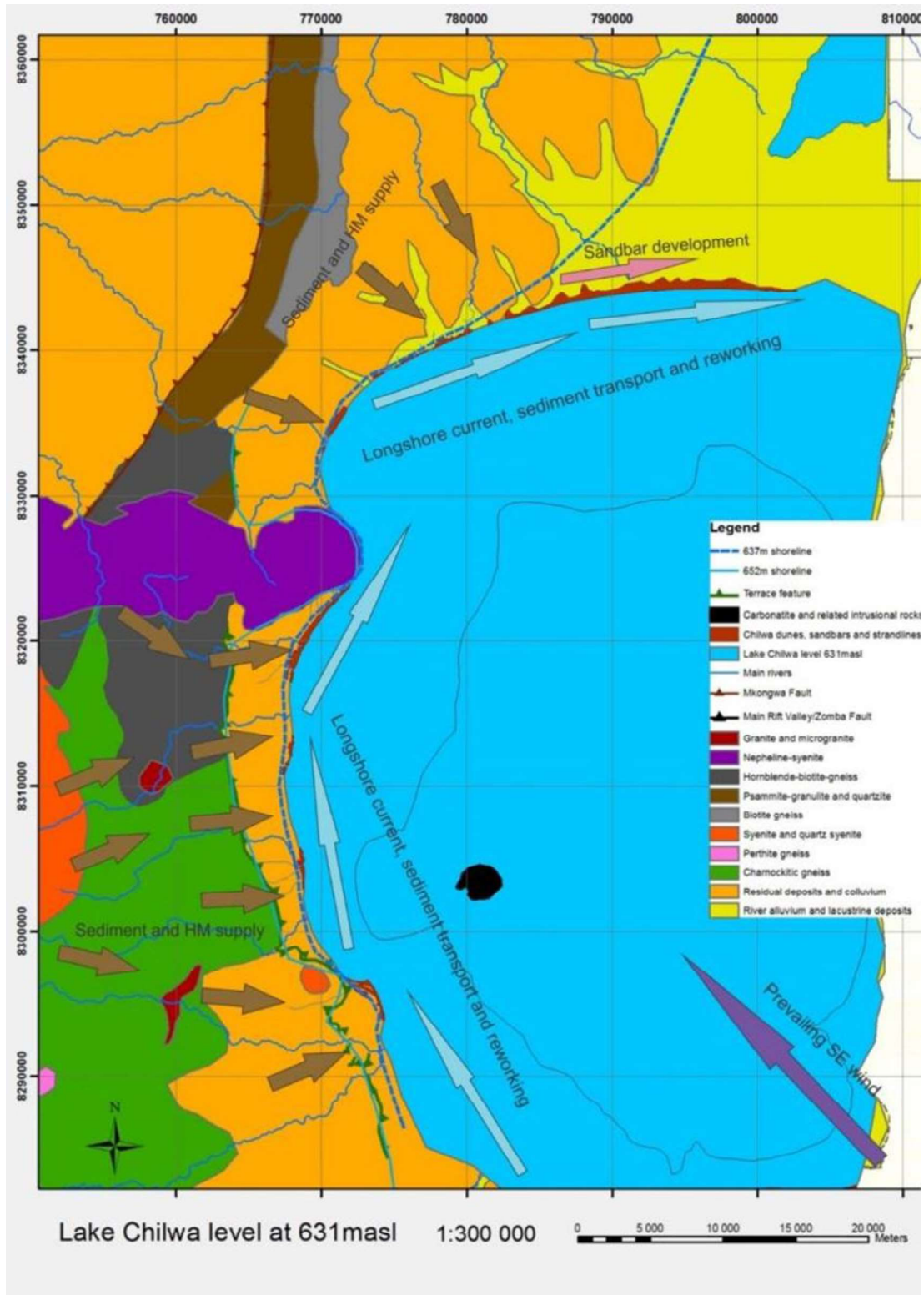
Chikala Hill, located to the north of the Mposa deposit, forms a natural barrier between the western and northern shores of Lake Chilwa. This break resulted in the Mposa deposit being coarser grained, having a lower fine and a higher HM content than the Halala and Namanja deposits to the south (Table 6.3).

The Halala and Namanja deposits consist of two separate geological units. At 631 mamsl, on the southern side of the sand ridge and equivalent to the western shore deposits, are beach deposits, which are in turn, partially overlain by aeolian dunes on the northern side of the ridge. The dunes can reach a height of 15 m above the beach deposits. The average grain size and HM content decrease from west-to-east along the sand ridge. The grain-size distribution patterns of the beach and overlying dune deposits also differ significantly.

This model of the genesis of the HM deposits around Lake Chilwa are schematically summarized in Figure 6.4.



Figure 6.4 Depositional model for the formation of the Lake Chilwa HMS deposits



Source: MEIML, 2016.

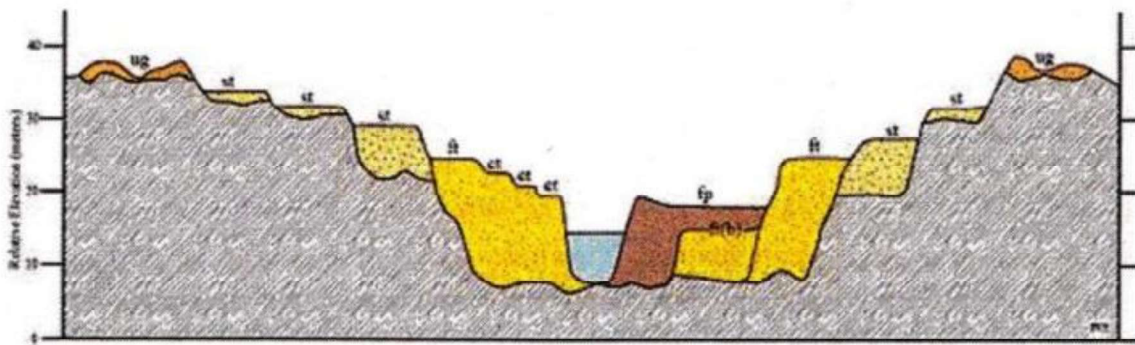
### 6.6.3 Preservation of HMS deposits

Following the deposition of the 631 mamsl level deposits, a rapid lowering of the lake level occurred, ensuring preservation of the deposits. The HMS deposits that occur at the 627 mamsl level have a much finer average grain size, lower HM content and a higher a higher slimes content than those occurring on the 631 mamsl level.

Seasonal and periodical fluctuation of the lake water level associated with varying sediment supply from the hinterland, as well as an overall long-term drop in water level in Lake Chilwa, resulted in the formation of a series of preserved terraces that host HMS deposits.

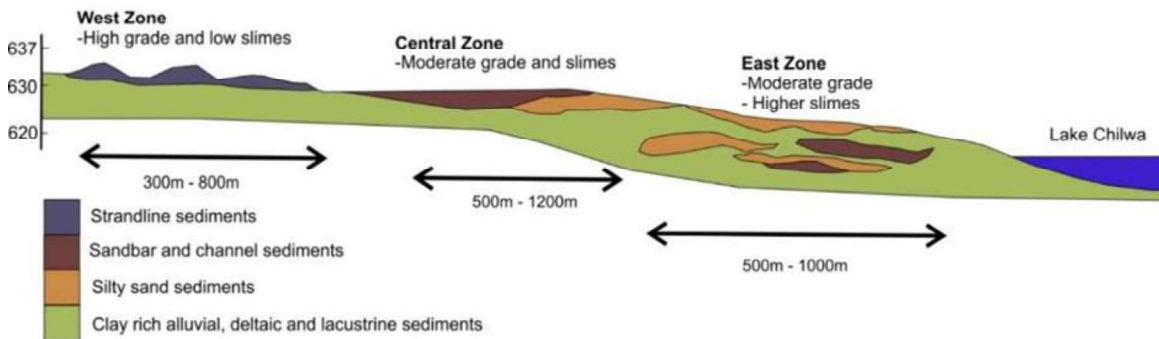
Figure 6.5 illustrates the terrace concept. Figure 6.6 is a simplified cross-section through Mpyupyu showing the resultant geology of these processes.

Figure 6.5 Cross-section showing the terrace concept



Source: Tate Minerals, 2012.

Figure 6.6 Simplified south-west/north-east section through Mpyupyu



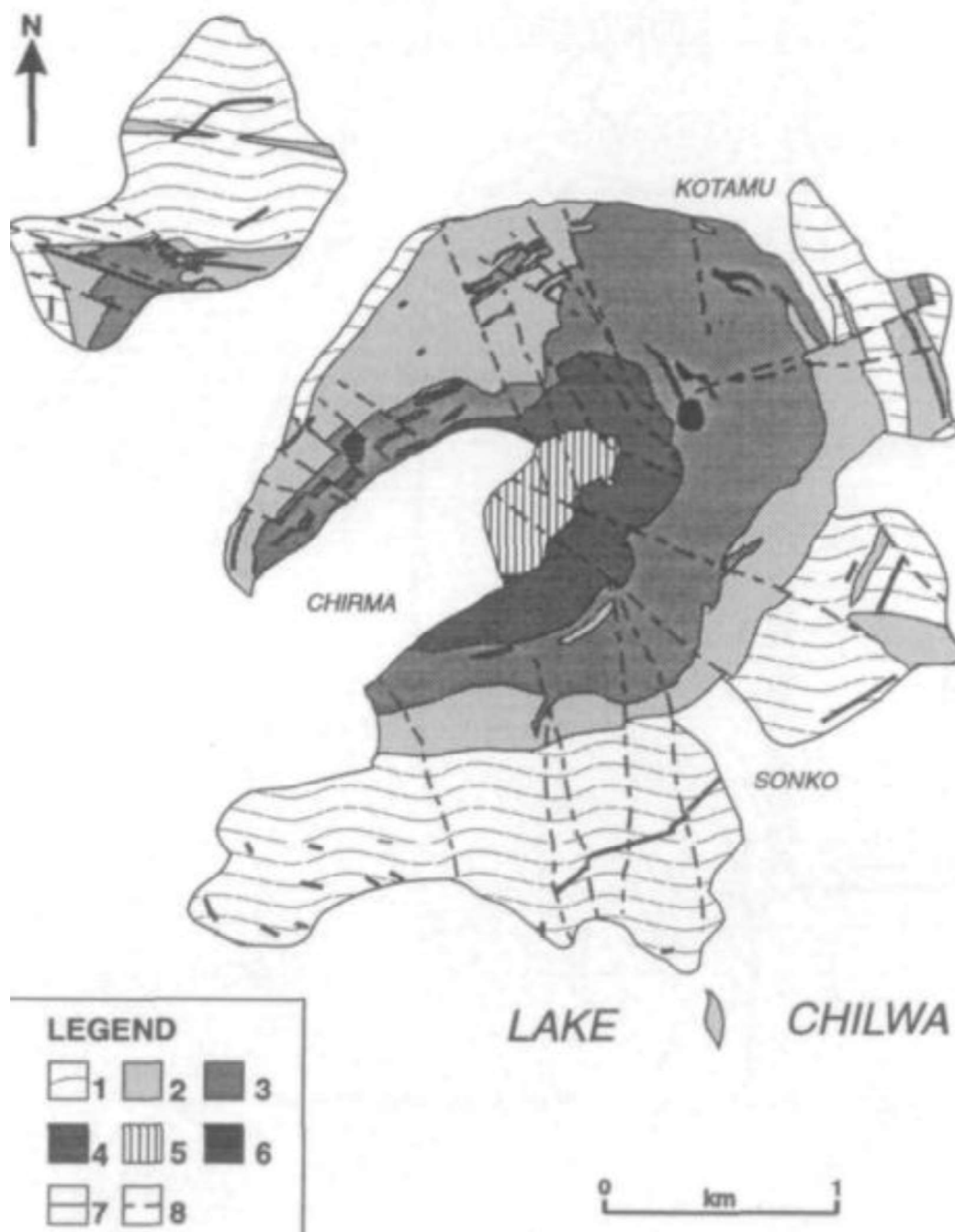
Source: MEIML, 2016.

## 6.7 Chilwa Island (EL0671/22)

The following description of Chilwa Island was sourced from HiTech AlkCarb (undated).

Chilwa Island, is approximately 4 km in diameter, located in the south-western quarter of Lake Chilwa and is almost wholly composed of carbonatite surrounded by fenitized Precambrian granulites and syenites. The central portion of the island is comprised of three distinct types of carbonatites that form a flat-topped, horse-shoe-shaped hill (Figure 6.7). The presence of pyrochlore, a possible source of Rare Earth Element (REE) metals has been noted in association with the ferrocyanatite. AMC is unaware of the presence of any substantial HMS deposits, located on Chilwa Island, at this time.

Figure 6.7 Geological map of the Chilwa Island carbonatite



Source: Simonetti and Bell, 1994.

Legend key:

- 1 Precambrian basement complex.
- 2 Potassic breccia.
- 3 Calciocarbonatite.
- 4 Magnesiocarbonatite.
- 5 Ferrocronatite.
- 6 Intrusive silicate plugs.
- 7 Intrusive silicate dykes.
- 8 Major faults.

## 7 Project history

### 7.1 Introduction

Several assessments and studies have been undertaken on the Lake Chilwa HMS deposits by MEIML and other companies. The completed work, results, and available information are summarized and discussed below.

### 7.2 Previous work

#### 7.2.1 Academic studies

Two academic studies were undertaken that had a specific focus on Lake Chilwa and the associated HMS deposits.

##### 7.2.1.1 Lancaster

Lancaster (1981) examined the north shore, Halala Sand Bar, in terms of formation and physical characteristics. He concluded that the sand bar was formed via a combination of lowering water levels in Lake Chilwa as well as the influence of a clockwise longshore current that transported sediment from west-to-south along the lake shore.

##### 7.2.1.2 Dill and Ludwig

Dill and Ludwig (2007) studied the geomorphological-sedimentological aspects of landform types and placer deposits in Southern Malawi. The study reviewed HM accumulation at different stages of physical and chemical wearing of land surfaces because of the opening of the East African Rift.

### 7.2.2 Historical exploration

#### 7.2.2.1 Brinkmann

Claus Brinkmann (Brinkmann, 1991; Brinkman, 1992; Brinkmann, 1993) worked on the Mpyupyu deposit between 1991 and 1993 as part of an initiative by the German Federal Government to aid mineral development in Malawi. A total of 125 test pits were completed on a 500 m × 500 m grid to depths ranging from 2 m to 4.2 m, depending on the height of the water table. HM-bearing sand was analysed for THM content and ilmenite. Brinkmann also undertook a radiometric survey of the Mpyupyu area. Eighty-eight (88) pits were used to delineate a grade and tonnage estimate of 125 Mt grading 4.3% THM at a cut-off grade of 2% THM.

#### 7.2.2.2 Millennium Mining Limited Investments

MML: explored the north shore HMS deposits. An initial auger drill programme of 31 holes (CHR001 to CHR031) was completed covering a 30 km strike.

An additional 104 air core (AC) holes were completed by Wallis Drilling on a 100 m × 100 m grid. Drilling and sampling can be summarized as follows:

- Halala: 64 holes (HA001 to HA076) for a total of 673 metres and 242 samples.
- Beacon: 11 holes (MP001 to MP012) for 69 metres and 28 samples.
- Namanja West: 29 holes (MP014 to MP044) for 234 metres and 89 samples.

The holes were sampled on three-metre composites, most of the AC holes drilled by MML for the northern targets remain open at depth, beyond the 10 m average length that was drilled. (Quantitative Group, 2013).

MML claimed to have defined a tonnage and grade estimate of 15.4 Mt grading 2.74% ilmenite and 0.2% zircon. No documentation to support the resource was made available to AMC.

MML drilled a further 22 auger holes (CHR055 to CHR076) on the Namanja dune followed by an additional 58 auger holes (CHR078 to CHR134) on a 2 km line spacing and 100 m hole spacing.

A JORC Code compliant MRE was claimed by MML from the drilling programme and the analysis of 68 samples taken at three-metre intervals. No supporting documentation was made available to AMC to support this estimate.

MML also declared an Inferred Mineral Resource of 30 Mt comprising of 5.20% ilmenite, 0.14% rutile, 0.16% zircon, and 0.20% leucoxene for Halala. This is based on 10 auger holes to a depth of 10 m. No documentation supporting the resource estimation was made available to AMC.

MML provided Ticor/Kumba (TICOR, 2003) with three bulk samples for testwork. The assemblages from the three samples average 9.8% THM, comprising 46% ilmenite, 6.4% magnetite, 0.7% rutile, 5.7% zircon, and 4.5% leucoxene. The remaining 37% was assumed to be garnets and amphiboles. There was no supporting documentation made available to AMC to justify these results.

These MREs were for internal use only and were not publicly reported.

AMC did not review the abovementioned statements or estimation methodology applied, and AMC does not assume any responsibilities for the accuracy of the figures.

### **7.2.2.3 Tate Minerals**

Tate Minerals (Tate) applied for the Lake Chilwa EL in 2012. Tate retrieved and digitized all available data and reports and had independent consultants review the results. The consensus opinion was that the quality of the previous exploration work accompanied by a lack of detail in the laboratory work and quality assurance and quality control (QA/QC) data precluded its use for JORC Code compliant Mineral Resource reporting.

In 2014, Tate entered a JV with MEIML to explore the HMS deposits identified by previous exploration activities.

### **7.3 MEIML**

MEIML undertook several early-stage assessment programmes, including metallurgical and process testwork studies, in 2014 and 2015 to verify the presence and HM content of the HMS deposits identified by earlier exploration work. This included auger drilling on existing and new targets as well preliminary process optimization and metallurgical studies.

Regional auger programmes indicated the potential for additional large, high-grade deposits on the EL.

Following the completion of the studies, it was concluded that additional exploration and testwork should be undertaken.

In 2015, an air core drilling (AC) and diamond core drilling (DD) programme was undertaken, with the stated aim being to obtain sufficient geological data to allow for a MRE that could be classified and reported according to the JORC Code. A total of 9,922 m (1,492 holes) of drilling was completed on the Mpyupyu, Bimbi, Mposa, and Halala deposits. A summary of the drilling undertaken by Mota is provided in Table 7.1.



Table 7.1 Lake Chilwa drilling summary

Target	AC		DD	
	Holes	Metres	Holes	Metres
Mpyupyu	406	2,790	69	495.45
Bimbi	241	1,422	52	314.25
Bimbi NE	53	249	15	84.40
Mposa	340	2,118	59	370.03
Halala	233	1,936	24	142.53
<b>Total</b>	<b>1,273</b>	<b>8,515</b>	<b>219</b>	<b>1,406.66</b>

MREs, reported according to the JORC Code, were completed for Bimbi (including Northeast Bimbi), Mpyupyu, Mposa, and Halala. Due to a failure in the primary laboratory (SGS in Johannesburg) a significant proportion of the samples were incorrectly assayed resulting in overstated slimes and slightly understated THM values. This resulted in the MREs being classified at the Inferred level of confidence. The MREs produced were *in situ* resources that were not constrained by a pit shell.

These MREs were for internal use only and were not publicly reported.

The compromised samples were re-assayed, however, MEIML had decided to discontinue the exploration programme and the relationship with Tate.

#### 7.4 LGM

In 2021, LGM, a fully owned subsidiary of MEIML, expressed a renewed interest in the Project and requested AMC to update the previous MREs using the re-assayed samples. AMC produced an updated mineralized inventories for Bimbi (including Northeast Bimbi), Mpyupyu, Mposa, and Halala, reporting the inventories at 1.0%, 3.0%, and 5.0% THM cut-offs.

#### 7.5 CML

In 2022, CML concluded the current agreement with LGM. CML requested AMC to constrain the MREs prepared for LGM in 2021 to demonstrate the requirement of reasonable prospects for eventual economic extraction (RPEEE) as required by the JORC Code. AMC reported the MREs for the Bimbi (including Northeast Bimbi), Mpyupyu, Mposa, and Halala, at 1.0%, 1.5%, and 3.0% THM cut-offs.

## 8 Historical mineralogical and processing studies

Following their agreement with Tate, MEIML undertook two rounds of metallurgical testwork and process design, as described following. It is CML's intention to update the testwork as soon as exploration drilling and the updated MREs have been prepared.

The initial mineralogical testwork was undertaken by SGS (Johannesburg), with the process testwork being undertaken by Mintek (Johannesburg).

### 8.1 Due diligence auger drilling and mineralogy testwork

MEIML drilled 37 auger holes on the Halala and Mpyupyu deposits. The samples were logged with representative samples being sent to SGS (Johannesburg) for screening and heavy liquid separation (HLS). The results of the HM analysis were used to make composite bulk samples for Halala and Mpyupyu that were used for early-stage mineralogical, metallurgical, and processing testwork. The testwork concentrated mainly on ilmenite as the zircon content was thought to be low, based on historic data.

Fifty-four samples (totalling 770 kg) from the Mpyupyu and 42 samples (totalling 500 kg) from Halala deposits were chosen from the auger samples, as two bulk sample composites, for metallurgical work. The testwork, undertaken by SGS (Johannesburg) resulted in the following conclusions been made (SGS Report no 13/858):

- The slimes (-63 microns ( $\mu\text{m}$ )) were found to contain noteworthy amounts of  $\text{TiO}_2$ .
- Ilmenite was found to be the major mineral present in the sink fractions.
- Other sink fraction minerals include zircon, garnet, amphibole, rutile, and quartz.
- The Mpyupyu East sink fraction comprises 84% ilmenite and the Halala fraction 66%.
- Several varieties of altered ilmenite were identified with variations in the Ti/Fe ratio.
- All minerals were found to be well liberated.
- The HM occurs mainly in the 106 to 212 $\mu\text{m}$  grain size fraction.
- Electron microprobe (EMP) analysis showed the ilmenite to contain 51.46% and 52.62%  $\text{TiO}_2$  for Halala and Mpyupyu East respectively and  $\text{ZrO}_2$  levels of 65% for both composites.
- 91% of  $\text{TiO}_2$  reports to ilmenite and altered ilmenite species for Mpyupyu and 94% for Halala.
- Monazite was found to be the major source of U+Th which ranged from 308 parts per million (ppm) to 338 ppm for the composite samples of Mpyupyu and Halala respectively.
- The sink fraction of Mpyupyu was found to be finer than that of Halala. From the Halala composite, 77% of the sink fraction reported to the +212  $\mu\text{m}$  class while only 45% of the Mpyupyu sink fraction was found to be larger than 212  $\mu\text{m}$ .

### 8.2 Optimization testwork

Following completion of the metallurgical testwork, two one-tonne bulk samples were extracted from representative areas at Halala and Mpyupyu (Table 8.1).

Table 8.1 Locations of the two Mintek bulk samples

Target	Easting	Northing
Halala	778,344	8,340,577
Mpyupyu	775,256	8,296,159

Mintek focused on producing a good-quality ilmenite product, this resulted in the zircon concentrate being product contaminated by monazite and other waste minerals (Mintek, 2015 and Mintek, 2016). A summary of the Mintek optimization testwork is provided as follows:

### Mpyupyu

- THM head grade of 5.37% containing 2.50% TiO<sub>2</sub> or 4.10% ilmenite.
- Desliming resulted in a 10.50% loss to mass. With a loss of 6.38% of TiO<sub>2</sub> to the overflow.
- Spiral recoveries for ilmenite were poorer than expected and graded 68.3% TiO<sub>2</sub>. It was concluded that recoveries could be increased to 92% by adding a scavenger concentrate to cleaner concentrate or choosing a wider fraction of the spiral product as the rougher concentrate.
- Good magnetic separation was achieved through the induced-roll magnetic separator.
- Overall TiO<sub>2</sub> recovery of 57% was achieved grading 49% TiO<sub>2</sub> which could be improved upon.
- It was concluded that the elimination of both the upfront loss of 6% TiO<sub>2</sub> as well as loss of product in the spiral circuit, could result in an overall recovery of 90% ilmenite grading 50% TiO<sub>2</sub>.

### Halala

- THM head grade of 5.63% containing 1.93% TiO<sub>2</sub> or 3.29% ilmenite.
- Desliming resulted in a 1.00% loss to mass, with a loss of 1.37% of TiO<sub>2</sub>. To the overflow.
- Spiral concentration achieved a recovery 90% for ilmenite.
- Magnetic testwork achieved high-grade, but lower recovery, due to the large amount of garnet present
- An overall TiO<sub>2</sub> recovery of 67% was achieved, with the final product grading 51% TiO<sub>2</sub>.

### Conclusions on the metallurgical testwork

The findings, conclusions, and recommendations of the testwork are summarized below (Table 8.2).

- Particle Size Distribution (PSD) of both the Halala and Mpyupyu samples indicated scalping at >425 µm; the oversize material was depleted of HM content. Mpyupyu reported a significant amount of HM mass to the <212 µm >75 µm fraction, while Halala reported in the <425 µm >212 µm fraction.
- Both samples reported <10% slimes at <38 µm with Halala at 2% and Mpyupyu at 7%.
- The Mpyupyu HM fraction was found to be superior to the Halala sample in terms of ilmenite and altered ilmenite content (83%) than Halala (64%). Halala reported a higher proportion of garnets (19%) and amphibole (12%), with Mpyupyu reporting a lower garnet and amphibole concentration (2% and 5% respectively). Both HM fractions contained 5% zircon.
- A rougher, cleaner, and re-cleaner spiral circuit yielded good results for both samples. A mass yield of 6% was achieved for Halala with THM concentrate (THMC) grades of >92% and recoveries of 96%. Recoveries for Mpyupyu were lower at 86%, due to the finer particle-size distribution of the material.
- For each sample (Halala and Mpyupyu), four spiral scenarios were evaluated:
  - Spiral circuit, without any scavenging, at the average head grade as obtained from testwork (6% THMC).
  - Spiral circuit, with scavenging, at the average head grade as obtained from testwork (6% THMC).
  - Spiral circuit, without any scavenging, at high head-grades, simulated at 12% THMC.
  - Spiral circuit, with scavenging, at high head-grades, simulated at 12% THMC.
- Closed-circuit spiral modelling indicated that Halala would not benefit from the inclusion of a scavenging stage to the circuit, while Mpyupyu would, due to the finer particle size distribution of the material.



- The different behaviours of the Halala and Mpyupyu material in spirals indicate that the two material types should not be blended.
- Wet high-intensity magnetic separation (WHIMS) indicated significant contamination of the magnetic ilmenite product with Fe-garnets especially for Halala. Dry magnetic separation of the wet magnetic product resulted in a high-grade ilmenite product.
- Alternatives to dry magnetic separation of the WHIMS product were investigated which included: selective screening, reverse floatation, and reductive roasting of the WHIMS product. None of these alternative methods proved effective.
- It was concluded that the processing flowsheet should include a two-stage WHIMS circuit for maximized zircon recovery followed by dry magnetic separation to maximize ilmenite grade.
- Gravity separation and upgrading was successfully done on the WHIMS non-magnetic product.
- ZrO<sub>2</sub> upgraded successfully to the non-conductive product through electrostatic separation, although several stages were required. ZrO<sub>2</sub> grades of 61% for Halala and 59% for Mpyupyu were produced, with the lower grades achieved being attributed to the presence of monazite in the product.
- The results show that Halala could produce a TiO<sub>2</sub> product at 50% grade and 76% recovery. Losses in the gravity circuit (10%) and wet and dry non-magnetic fractions could be reduced by optimization and an overall recovery of +80% should be achievable.
- The results for Mpyupyu show that an ilmenite product at a grade of 52% TiO<sub>2</sub> and 68% recovery can be achieved. Further optimization work could reduce the 13% loss in the gravity tails and recovery of 80% should be achievable.
- Zircon products, grading 59% ZrO<sub>2</sub>, were produced at recoveries of 65% for Halala and 38% for Mpyupyu.
- Table 3.2 shows the final product specifications. Marketing studies indicated a penalty for the ilmenite product due to high Cr levels and for Zr, due to high Th+U levels and low ZrO<sub>2</sub> and HfO<sub>2</sub> levels.
- It was concluded that further optimization work on representative bulk samples should focus on the following:
  - Increasing product recovery to +80% for ilmenite and 75% for zircon by reducing HM losses in the spirals circuit and dry and wet non-magnetic fractions.
  - Removing Cr and hematite from the magnetic product to increase the TiO<sub>2</sub> grade to +52% and subsequently the product value.
  - Remove monazite from the zircon product, to increase the ZrO<sub>2</sub> + HfO<sub>2</sub> grade to a 65% minimum and decrease the Th+U content along with the Ce and La.

# Independent Geologist's Report

Chilwa Minerals Ltd

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Table 8.2 Characteristics of the ilmenite and zircon products from the Mintek work for Mpyupyu East and Halala

	<b>TiO2 (%)</b>	<b>Fe2O3 (%)</b>	<b>FeO (%)</b>	<b>ZrO2 (%)</b>	<b>SiO2 (%)</b>	<b>Al2O3 (%)</b>	<b>P2O5 (%)</b>	<b>CaO (%)</b>	<b>MgO (%)</b>	<b>Cr2O3 (%)</b>	<b>Nb2O5 (%)</b>	<b>Na2O (%)</b>	<b>V2O5 (%)</b>	<b>CeO2 (%)</b>	<b>La2O5 (%)</b>	<b>S (%)</b>	<b>HfO2 (%)</b>	<b>Pb (ppm)</b>	<b>Sn (ppm)</b>	<b>As (ppm)</b>	<b>U (ppm)</b>	<b>Th (ppm)</b>	<b>GOI (1000oC)</b>	<b>Total</b>
Hlala Ilmenite	50.72	30.18	16.97	0.10	0.30	0.52	0.05	0.17	0.07	0.08	0.10	0.10	0.25	0	0	0.01	0	51.4	36.6	30.2	9	22.5	1.76	100.97
Mpyupyu Ilmenite	52.18	29.61	15.68	0.29	0.19	0.47	0.05	0.08	0.36	0.13	0.08	0.11	0.28	0.01	0	0.02	0	71.0	39.6	11.5	7.90	20.9	1.76	100.73
Hlala Zircon	0.36	0.56		60.62	33.9	1.03	0.30	0.10	0.79	0.05	0.03	0.10	0.05	0.41	0.19	1.04	1.04	46.2	1.9	26.8	40.75	757.5	0.13	99.28
Mpyupyu Zircon	1.59	1.83		59.18	32.07	0.45	0.99	0.05	0.37	0.05	0.03	0.10	0.05	1.68	0.82	1.06	1.06	548.0	2.5	135.0	99.80	2750.0	0.11	100.13

Source: Mintek, 2015; Mintek, 2016.

### 8.2.1 Allied Mineral Laboratories ore characterization

Six, 20 kg samples, were taken from Mposa, Mpyupyu Main, Mpyupyu East, Bimbi Main, Bimbi NE, and Halala (Table 8.3) and sent to Allied Mineral Laboratories (AML) in Perth for ore characterization testwork. The aim of the work was to investigate potential ilmenite and zircon products from the individual deposits as well as to gain an overall understanding of the Chilwa HMS deposit (AML, 2015a; AML, 2015b).

Table 8.3 Bulk sample positions and compositions for the AML work

Target	Laboratory	Type	Easting	Northing	Comment
Mpyupyu East	AML	Pit	775,256	8,296,159	Ore Characterization
Mposa	AML	Pit	769,427	8,321,114	Ore Characterization
Halala	AML	Pit	778,344	8,340,577	Ore Characterization
Bimbi NE	AML	Auger composite	769,666	8,306,909	Ore Characterization
Bimbi NE	AML		769,750	8,306,500	
Bimbi Main	AML	Auger composite	768,705	8,304,402	Ore Characterization
Bimbi Main	AML		768,701	8,304,120	
Bimbi Main	AML		768,709	8,303,833	
Mpyupyu West	AML	Auger composite	772,900	8,296,111	Ore Characterization
Mpyupyu West	AML		773,110	8,296,055	
Mpyupyu West	AML		773,659	8,295,768	
Mpyupyu West	AML		773,501	8,296,094	
Mpyupyu West	AML		773,350	8,296,286	

Source: AML, 2015a; AML, 2015b.

The Mposa and Mpyupyu East first samples were screened at +1 mm and -53  $\mu\text{m}$ , the sand fraction was processed by wet gravity separation and electrostatic and magnetic separation. The second batch of four samples (Mpyupyu Main, Bimbi Main, Bimbi NE, and Halala) were screened at +1 mm and -45  $\mu\text{m}$ . This portion of the sand fraction was subjected to HLS while the remaining sand fractions were treated using gravity and electrostatic and magnetic separation. All fractions were analysed using XRF analysis.

The sand fractions were processed by wet gravity separation (shaking table), the HM concentrate then underwent electrostatic separation to produce a conductor (ilmenite) and non-conductor (zircon/rutile) product. The non-conductor product was submitted to magnetic separation to produce a clean zircon product. All fractions were analysed using XRF analysis.

Table 8.4 provides screening results for the as well as the HM content of the sand fraction and yield from the gravity separation.

Table 8.5 details the grades of the potential ilmenite products from the six samples.

Table 8.6 details the grades of the potential zircon products from the six samples.

No optimization was undertaken; high HM losses were reported to the slimes of the Mpyupyu East sample. It was concluded that a better yield could be obtained through optimization and fine tuning of all stages. No cleaning of the products was undertaken.

Table 8.4 Results from the screening and wet gravity separation of the AML samples

Item	Mposa	Mpyupyu East	Mpyupyu Main	Bimbi NE	Bimbi Main	Halala
Sample number	91102	91103	1772	1773	1774	91104
Coarse (+1 mm)	10.60	5.60	9.84	18.45	9.96	15.18
Sand (45 µm<1 µm) <sup>a</sup>	88.60	73.70	82.12	72.91	82.76	82.63
Slimes (<45 µm) <sup>a</sup>	0.80	20.60	8.04	8.64	7.28	2.19
%THM of sand fraction	44.30	4.50	16.23	5.01	11.24	5.36
HMC yield from sand wet gravity	41.60	3.40	13.70	4.10	10.10	3.60

Source: AML, 2015a; AML, 2015b.

<sup>a</sup> 53 µm for Mposa and Mpyupyu East.

Table 8.5 Potential ilmenite product characteristics

Sample		Mposa	Mpyupyu East	Mpyupyu Main	Bimbi NE	Bimbi Main	Halala
% of HM fraction		87.4	84.9	88.6	86	85.4	81.5
Product	Unit						
TiO <sub>2</sub>	%	50.2	53.53	52.5	55.7	52.6	50.3
Fe <sub>2</sub> O <sub>3</sub>	%	48.02	45.59	47.4	41.4	46.2	46.4
Al <sub>2</sub> O <sub>3</sub>	%	0.56	0.38	0.32	0.65	0.4	1.1
SiO <sub>2</sub>	%	0.72	0.6	0.61	0.96	0.52	1.67
Cr <sub>2</sub> O <sub>3</sub>	%	0.03	0.07	0.05	0.1	0.05	0.04
ZrO <sub>2</sub> + HfO <sub>2</sub>	%	0.05	0.04	0.05	0.07	0.02	0.09
CaO	%	0.02	0.03	0.03	0.08	0.02	0.09
MgO	%	0.17	0.45	0.46	0.21	0.22	0.28
MnO	%	1.72	1.04	1.03	1.42	1.37	1.41
CeO <sub>2</sub>	%	0.01	0.02	<0.01	0.02	<0.01	<0.01
Th	ppm	<10	<10	<10	60	20	40
U	ppm	<10	<10	<10	<10	<10	<10

Source: AML, 2015a; AML, 2015b.

Table 8.6 Potential zircon product characteristics

Sample		Mposa	Mpyupyu East	Mpyupyu Main	Bimbi NE	Bimbi Main	Halala
% of HM fraction		3.13	3.74	2.01	5.38	3.11	1.22
Product	Unit						
ZrO <sub>2</sub> + HfO <sub>2</sub>	%	63.85	64.87	66.27	66.12	65.3	64.49
TiO <sub>2</sub>	%	1.42	0.18	0.14	0.13	0.55	1.13
Fe <sub>2</sub> O <sub>3</sub>	%	1.34	0.17	0.12	0.14	0.33	0.46
Al <sub>2</sub> O <sub>3</sub>	%	0.31	0.55	0.16	0.22	0.31	0.47
SiO <sub>2</sub>	%	31.9	33.6	32.8	32.8	33.2	32.3
CeO <sub>2</sub>	%	0.06	0.05	0.03	0.03	0.04	0.03
Th	ppm	260	140	80	160	270	200
U	ppm	270	250	210	350	300	260

Source: AML, 2015a; AML, 2015b.

It was concluded that high-quality zircon and ilmenite products could be produced from all the deposits. Recovery, although relatively high, could also be improved (AML, 2015a; AML, 2015b).

## 9 MEIML exploration drilling

### 9.1 Background

MEIML employed Aqua Terra (a privately owned Mozambique drilling contractor) to manage the drilling at Lake Chilwa. MEIML supplied a diamond and AC rig, Aqua Terra supplied an additional AC crawler-rig and personnel. A geologist was assigned to each drill rig on a full-time basis. The geologist's role was not only to log the samples and monitor the drilling depth, but also to ensure that the quality of samples with an acceptable recovery was achieved. Holes with very low recoveries were redrilled.

Diamond core drilling was completed using a triple-tube core barrel, with the sample barrel sleeved with transparent plastic tube. The sample barrel was equipped with a sand catcher device to secure the column of sand extracted by the drilling. Twenty percent of the AC holes drilled by MEIML were twinned with diamond core holes.

Mobilization of drilling equipment and personnel commenced in August 2015 with demobilization being completed by the end of November 2015. A total of 8,515 metres of AC and 1,407 metres of core drilling were completed during the programme (Table 9.1).

Table 9.1 Lake Chilwa drilling summary

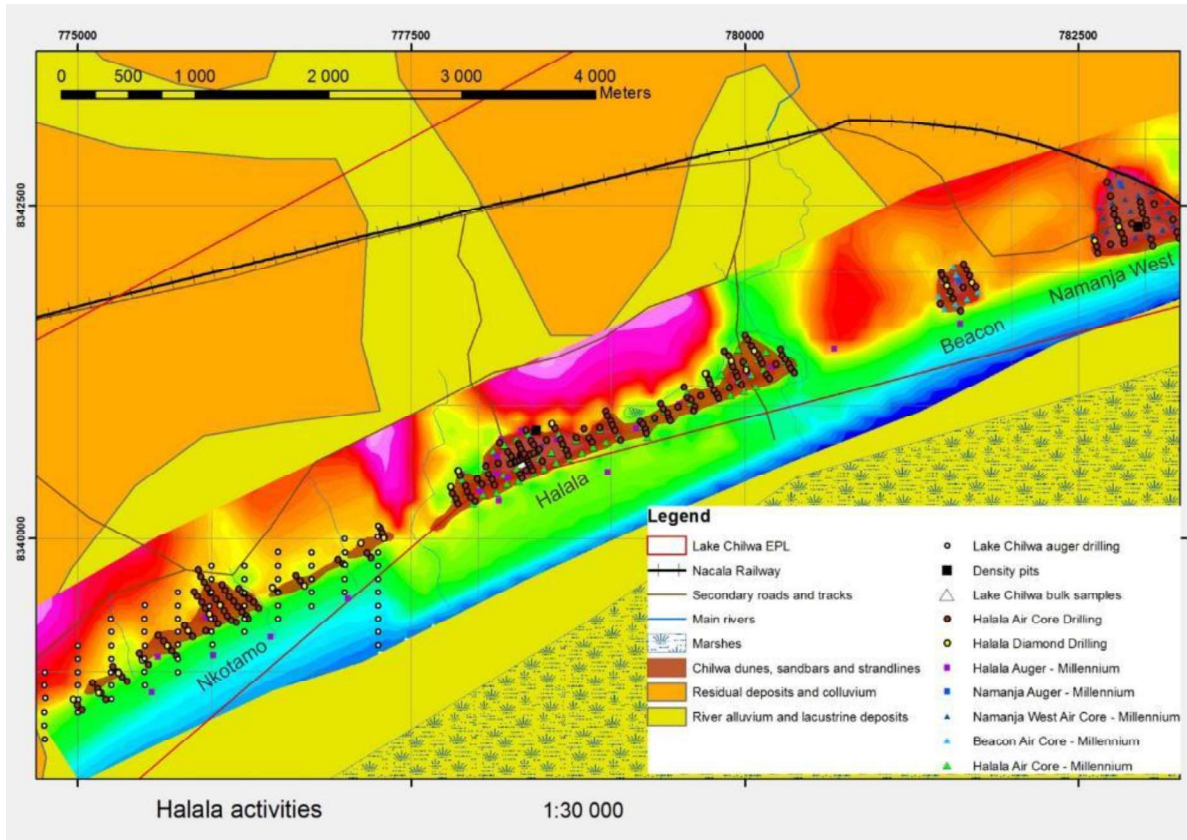
Target	AC		Diamond	
	Holes	Metres	Holes	Metres
Mpyupyu	406	2,790	69	495
Bimbi	241	1,422	52	314
Bimbi NE	53	249	15	84
Mposa	340	2,118	59	370
Halala	233	1,936	24	143
<b>Total</b>	<b>1,273</b>	<b>8,515</b>	<b>219</b>	<b>1,407</b>

Source: AMC, 2016.

#### 9.1.1 Northern shore targets

The northern targets drilled include Nkotamo, Halala, Beacon, and Namanja West. The drilling was planned on 100 m line spacing and 50 m hole spacing. The drill programme was designed to include the historical MML holes. Some of the historical holes were twinned to verify their drill logs. Figure 9.1 shows the MEIML drilling sites along with the MML drilling for the northern targets. Holes were drilled to a depth where the drill entered the clay "bedrock". A cross of close-spaced drilling on the Halala deposit was designed to allow geostatistical analysis.

Figure 9.1 Mota-Engil and MML AC and auger drilling



Source: MEIML, 2015.

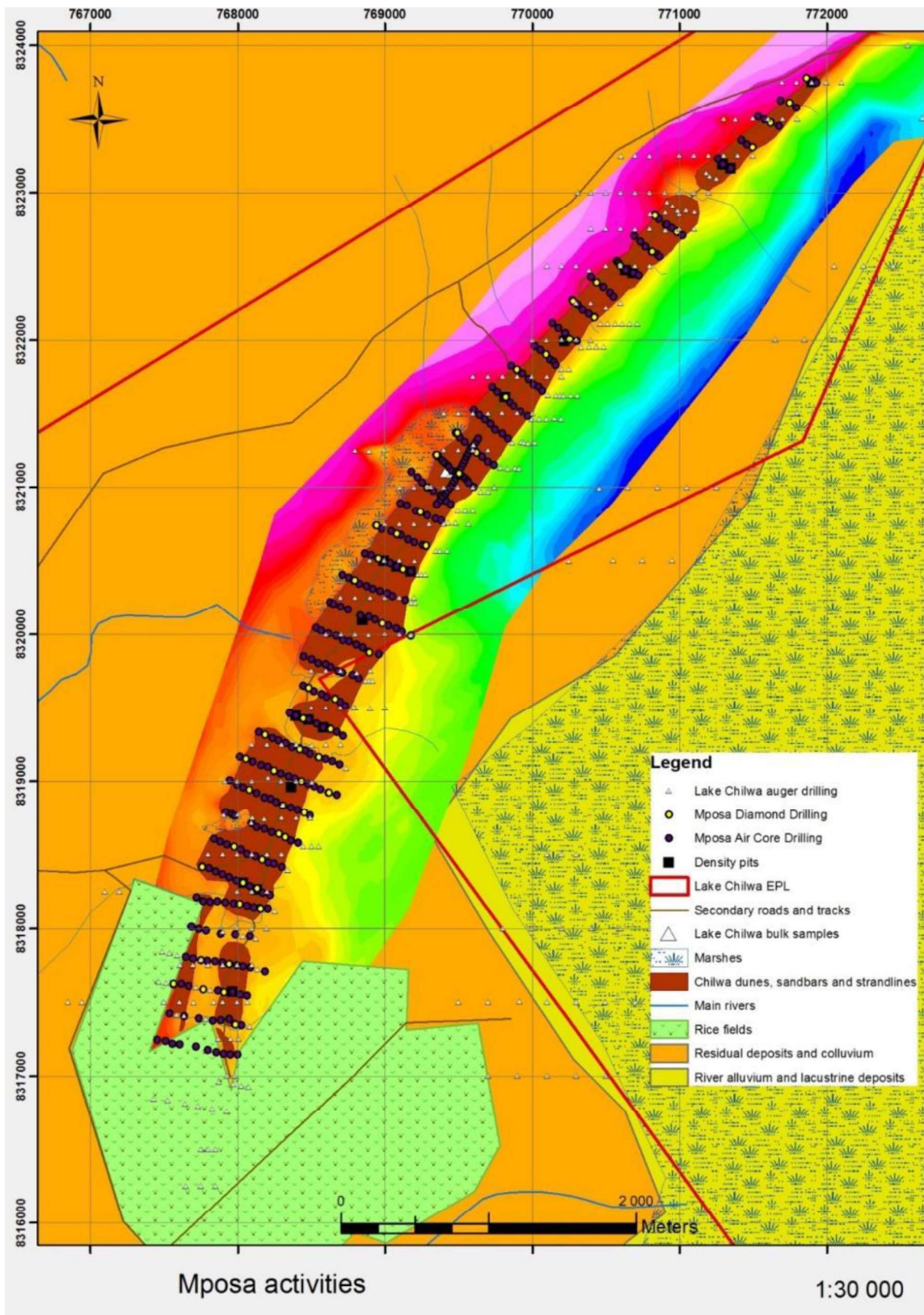
### 9.1.2 Western shore targets

The western targets drilled by MEIML includes Mposa, Bimbi Main, Bimbi NE, Mpyupyu Main, and Mpyupyu East.

Mposa (Figure 9.2) was drilled on 200 m line spacing with 50 m spacing between holes, to a depth where the clay bedrock was intersected.

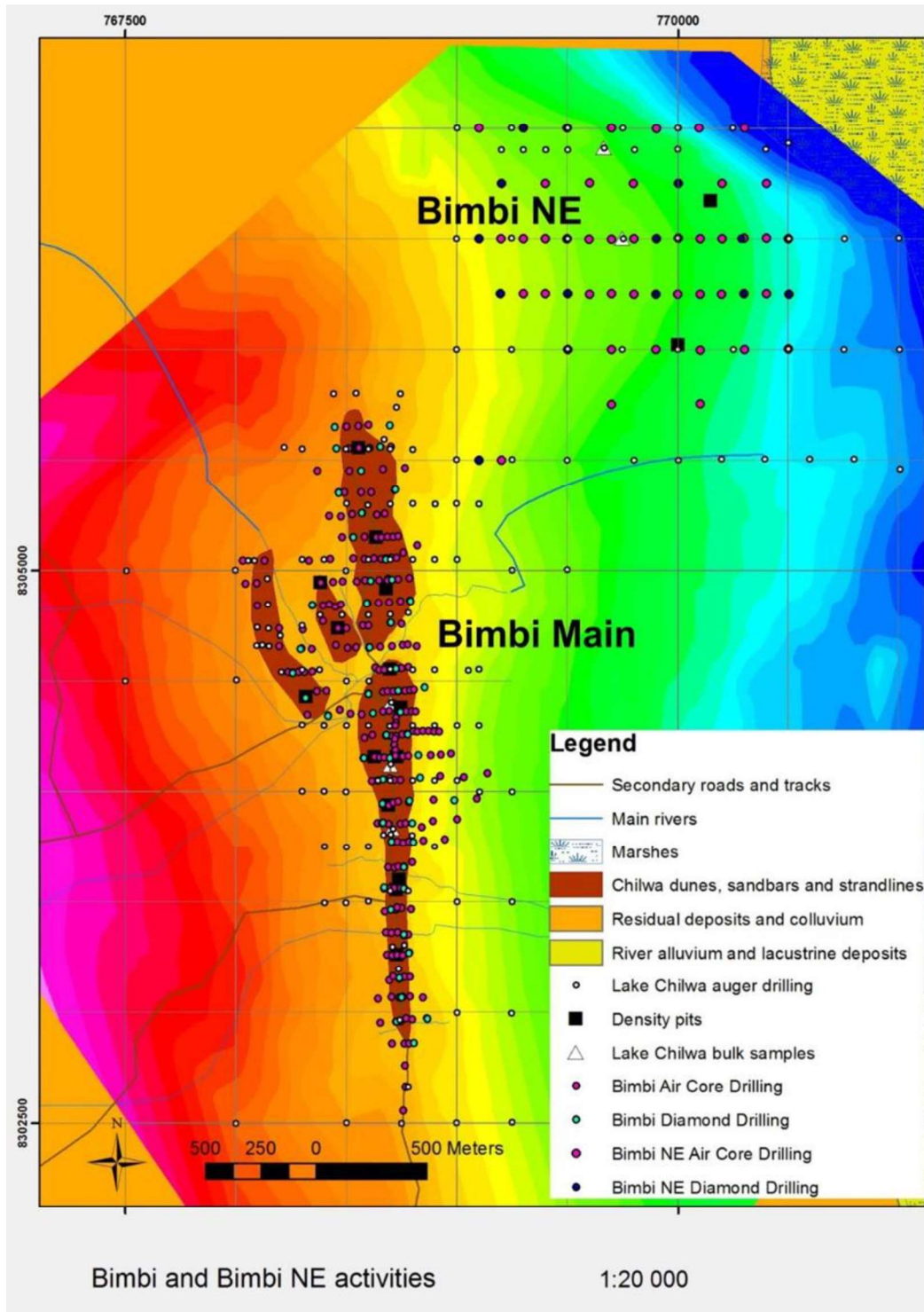


Figure 9.2 AC and DD positions on the Mposa deposit



Drilling on the Bimbi Main deposit (Figure 9.3) was planned on 100 m line and 50 m hole spacing. This was changed when drilling commenced to a 25m hole spacing, due to the narrow nature of the deposit. Bimbi NE was drilled on a 250 m lines with 100 m or 200 m hole spacing as it was considered as being an exploration target than a resource target at the time.

Figure 9.3 AC and DD on Bimbi and Bimbi NE

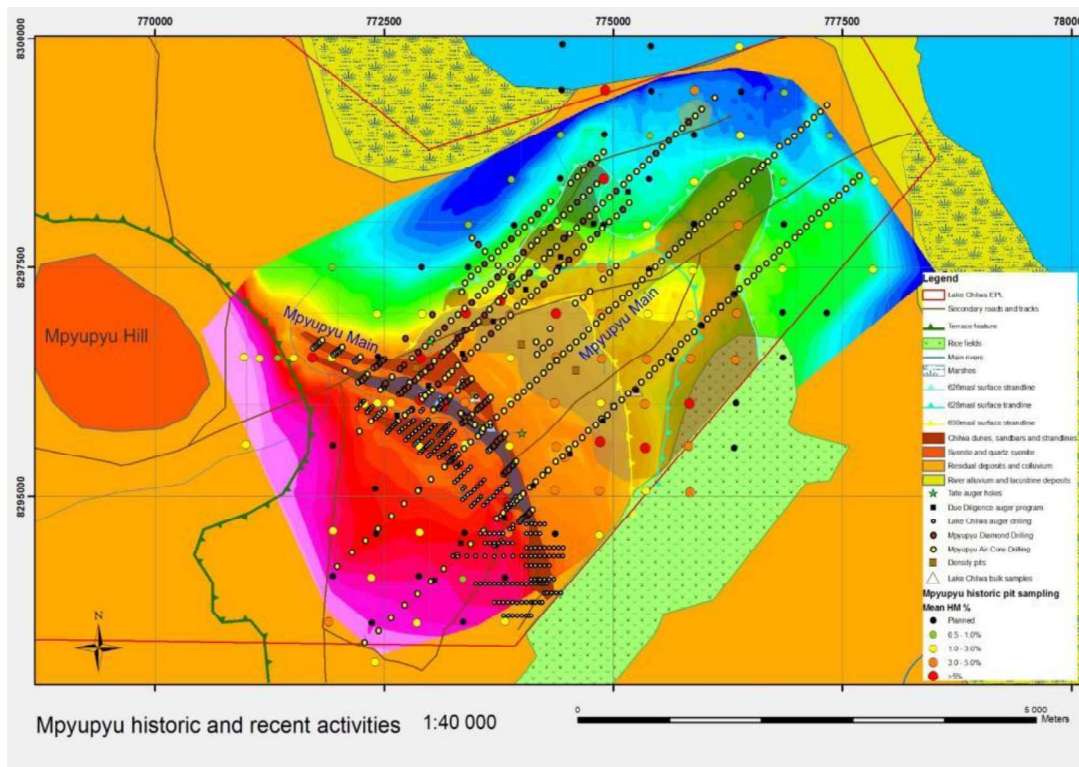


Source: MEIML, 2015.



The Mpyupyu target consists of two distinct geological units namely Mpyupyu Main and Mpyupyu East. Mpyupyu Main is the equivalent of Bimbi Main and Mposa strandline deposits. Drilling (Figure 9.4) along the Mpyupyu Main target was done on a 200 m or 250 m line spacing and 50 m hole spacing. Some lines on Mpyupyu Main were infilled to 25 m where it was deemed necessary based on field observations from earlier drilling. Three orientation lines were drilled on Mpyupyu East on 800 m line spacing and 100 m hole spacing with the intention to do complete infill drilling later. Only three of the intended infill lines were completed on 200 m line spacings before the end of the programme.

Figure 9.4 AC and DD at Mpyupyu with auger drilling and historic pit positions



Source: MEIML, 2015.

Closely spaced drillholes, forming crosses were drilled on Halala, Mposa, Bimbi Main, and Mpyupyu Main to allow for geostatistical analysis. These geostatistical drillhole crosses drilled to understand the variability in the HM content and other ore characteristics across and along-strike of the different deposits.

## 9.2 Drillhole logging

AC holes were geologically logged while they were being drilled. A standard size portion of each 1 m sample was panned, with the following data being manually recorded on logging sheets:

- Sample weight (very wet samples were not weighed at the drill rig).
- Moisture content (dry, moist, wet).
- Lithology (sand, clay, silty sand, etc.).
- Sorting (well, poor, or medium sorted).
- Colour (using a colour chart).
- Grain size (coarse, medium, fine, etc.).
- Visual estimation on THM content (%THM).
- Visual estimation on slimes content (% slimes).
- Additional comments by the Geologist.

A portion of the washed sample was stored in a chip tray for future reference.

Diamond core was stored and logged at the drill camp. In addition to the information that was recorded during AC drilling, core loss, sedimentary structures and contacts were also recorded. After logging, the diamond core was split for analysis into sample intervals based on geological contacts and lithology.

Logging data was captured in Excel™, daily and sent to the Database Manager for incorporation in the master data sheet (also Excel™ based). These data were eventually consolidated in a SABLE™ drillhole logging database.

Five percent of all logging was checked against the AC samples by the Senior Project Geologist to ensure consistency in the geological descriptions.

### 9.3 Collar surveying

Drillholes were positioned by the Geologist in charge of the rig using a hand-held GPS. A digital terrain model (DTM) was constructed from drillhole collar data and some limited survey lines. All survey co-ordinates are in the WGS84 (World Geodetic System) coordinate system and datum in the UTM projection (Universal Transverse Mercator) for the 36-south zone. The reference surface model used to set the elevation was the geode EGM2008 (Earth Gravity Model).

### 9.4 Sample handling

Samples were collected at the cyclone at the AC rigs in numbered bags showing the drillhole identification number (ID), sample ID and drill interval. The samples were weighted, and the weight recorded by the geologist. The ideal weight for a 1 m AC sample was calculated to be 14 kg. Sample information was entered into the Excel™ database once the holes were complete and transported to the exploration camp where the bags were checked on arrival against the inventory list.

All AC samples were sundried using large metal trays with ridges along the sides to prevent sample spillage. After drying, the samples were returned to the original bag and the weight recorded.

After drying, a 1 kg laboratory sample was split from samples using a 50:50 riffle splitter. The remaining sample was returned to the sample bag. The laboratory subsample was transferred to a smaller sample bag, weighted, ticketed and recorded. After ticketing, the one kg samples were packed in large bags for shipment.

A second sample was split from main sample to be used as an umpire sample. These were separately ticketed and recorded.

Samples were shipped to SGS in Johannesburg (SGS) , South Africa via road freight.

Umpire samples were air freighted to AML in Perth for analysis. The samples were split into separate batches, those from below 2 m depth and those from above 2 m. The samples from above 2 m underwent heat treatment before entering Australia.

#### 9.4.1 Standard preparation

An internal standard was prepared for use in the independent QA/QC programme. The standard was prepared from a one tonne sample, that was excavated by hand from Mpyupyu East. The bulk sample was spread out on a large groundsheet and sundried for a day. The sample was then coned and quartered and cross-blended down to smaller portions. The final portions (100 samples) were split down to 1 kg samples using a 50:50 riffle splitter, which were bagged. Randomly selected samples were sent for HLS laboratory analysis.

Initial calibration of the reference sample used four separate laboratories with ten samples sent each for analysis. This initial work was not conclusive due to unexpected variations in the analytical process between laboratories which resulted in conflicting results. MEIML decided to continue submitting the reference samples as part of the sampling programme and develop an expected value and variance over time; however, the standard was of use in the QA/QC programme as it assisted in determining that there were problems with the SGS laboratory results.

## 9.5 QA/QC

The following QA/QC procedures were employed by MEIML:

- Check logging of 10% of all the holes by the Senior Project Geologist.
- Field duplicates: 1 in 20 samples were randomly selected field duplicates and were submitted in the same batches as the primary samples.
- Blanks: inserted randomly at a ratio of 1 in 20 samples.
- Internal reference sample (standard): inserted randomly at a ratio of 1 in 20 samples.
- Umpire samples: approximately 5% of all samples were duplicated and sent to an external umpire laboratory (AML laboratories).
- Both SGS and AML used internal duplicates as check samples.

### 9.5.1 QA/QC results

In August 2016, it was noted that anomalously high slimes values (>30%) were being recorded for material that should have been below 10% slimes. The result of the investigation determined that the preparation procedures followed by SAG (Johannesburg) were faulty. The compromised samples were re-assayed by SAS at their cost and were used by AMC for the 2021 MRE, that this IGR is based on. However, due to the uncertainties regarding the work undertaken by SGS, AMC has remained cautious in their Mineral Resource classification approach.

The relevant QA/QC issues as well as the impact that this has had on the resultant Mineral Resource classification are discussed in this section of this IGR.

#### 9.5.1.1 Core recovery

Due to poor core recoveries (<70%), as well as the volume variance differences that exist between AC and DD samples; AMC elected to exclude the DD data from the Mineral Resource estimation process. In addition to the low recoveries experienced in the DD holes, determining the depth location of the recovered material in the DD holes proved to be problematic.

#### 9.5.1.2 Blanks

MEIML submitted analytical blanks to SGS to monitor potential contamination at the sample preparation stage. Blanks were randomly inserted at a rate of 1:20 samples prior to dispatch to the laboratory. Pool filter sand was used as it was cost-effective and readily available. In total, 484 (6.4%) blank samples were submitted.

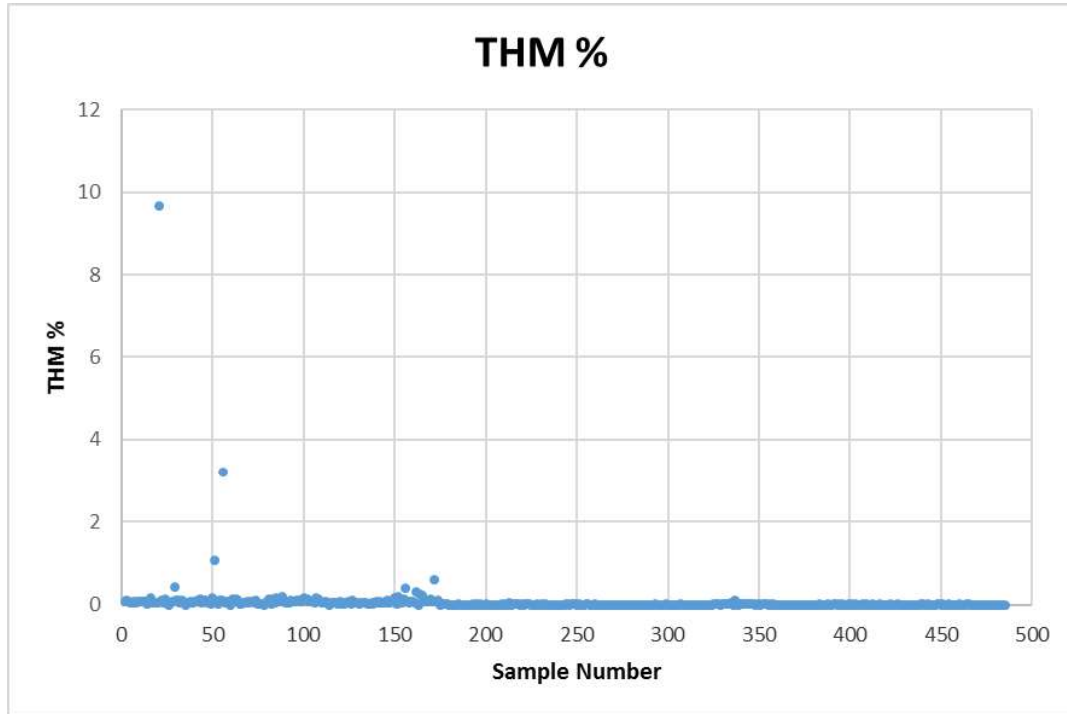
The blanks acted as standards for the determination of ultra-low slimes (Figure 9.5) and oversize (Figure 9.6), and strictly as blanks for the THM results. Anomalous values were determined to be due to heavy mineral or heavy particulate contamination in the samples, likely to metal contamination from the manufacturing process and accessory heavy minerals.

Fluctuations in the oversize (Figure 9.7) are thought to relate to variations between the bags of sand used.

The Competent Person believes that the overall contamination is not material for the Project and the results of blanks analyses are within acceptable limits.

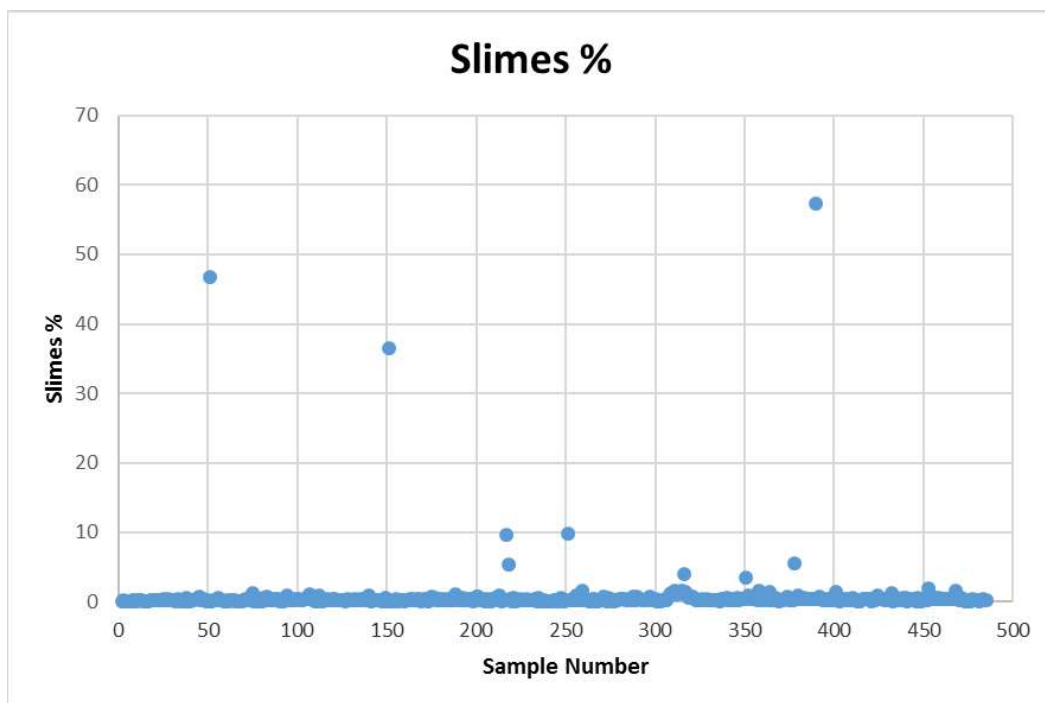
It should be noted that the detection limit was 0, that is, no heavy minerals or slimes were supposed to be present in the blank, thus there is no 10x detection limit line. The oversize analysis was used as a performance guide.

Figure 9.5 THM values for the pool sand blanks



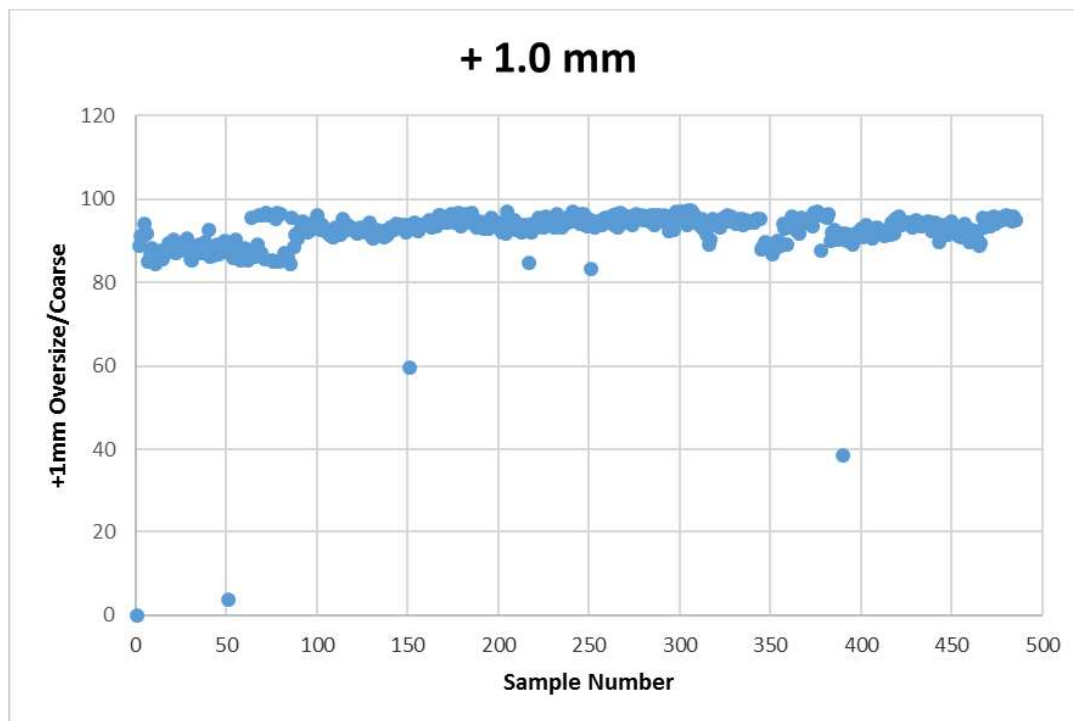
Source: AMC, 2016.

Figure 9.6 Slimes values for the pool sand blanks



Source: AMC, 2016.

Figure 9.7 Oversize values for the pool sand blanks



Source: AMC, 2016.

### 9.5.1.3 Field duplicates

Field duplicate samples were selected from AC samples that MEIML observed to represent mineralized material. The objective of field duplicate sampling is to monitor in-situ sample homogeneity. Field duplicates were taken on average every 1: 20 routine samples. Of the 7,599 samples taken (both AC and DD), 498 of the samples were field duplicates (6.6% of the analytical database).

Analysis of the field duplicate results, by AMC, indicated a weak bias towards the duplicate for slimes (Figure 9.8).

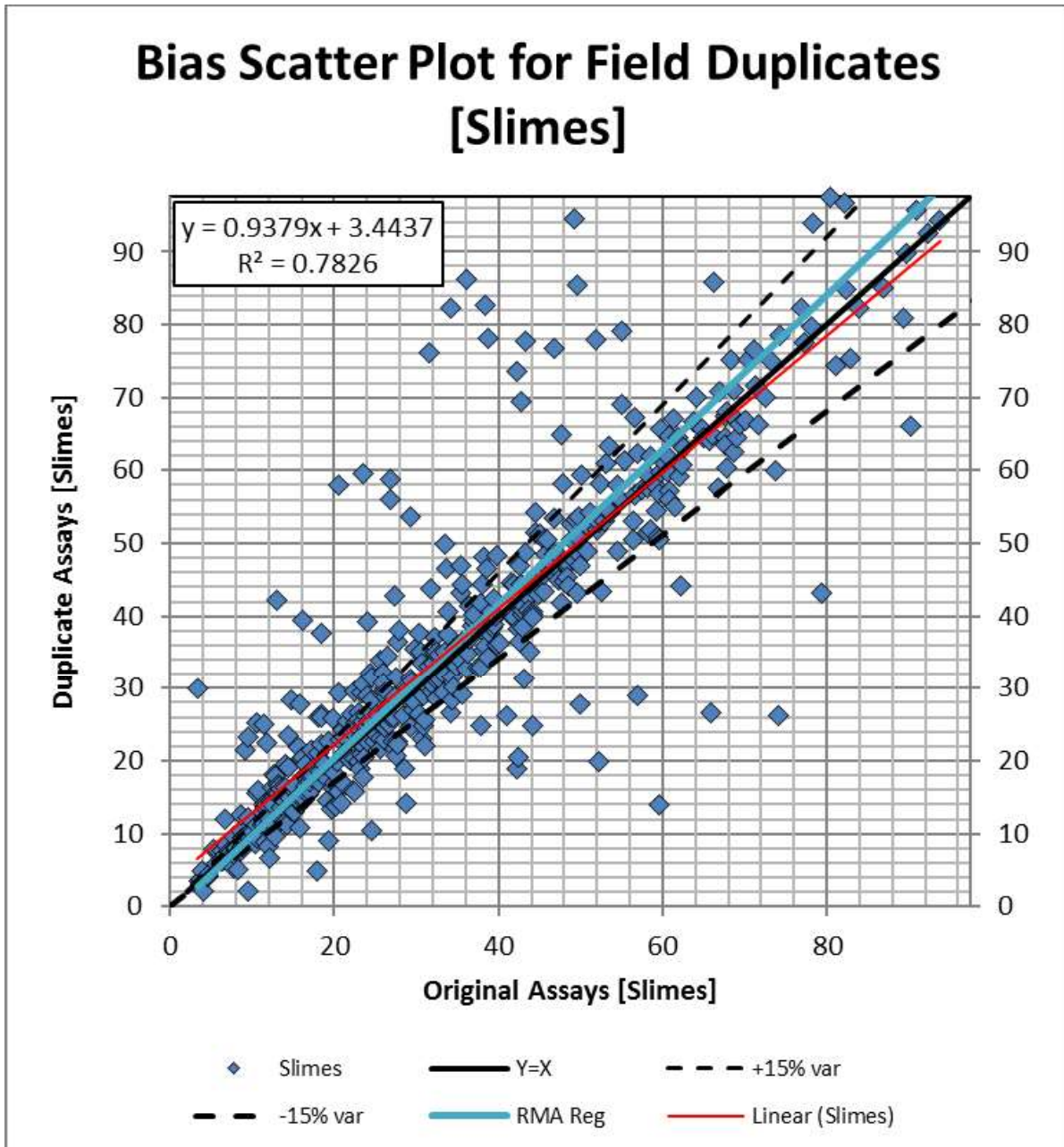
The THM duplicates have a correlation coefficient of 0.93 which is good for field duplicates (Figure 9.9).

The analysis for the oversize field duplicates is presented in in Figure 9.10.

It is important to note that as these sample pairs underwent analysis at approximately the same time, they are both affected by the error that was noted in the introduction to this section.

AMC concludes that the reported precision for all elements in field duplicates returned acceptable results. The relative average difference between the assays demonstrated acceptable sample repeatability using field duplicates.

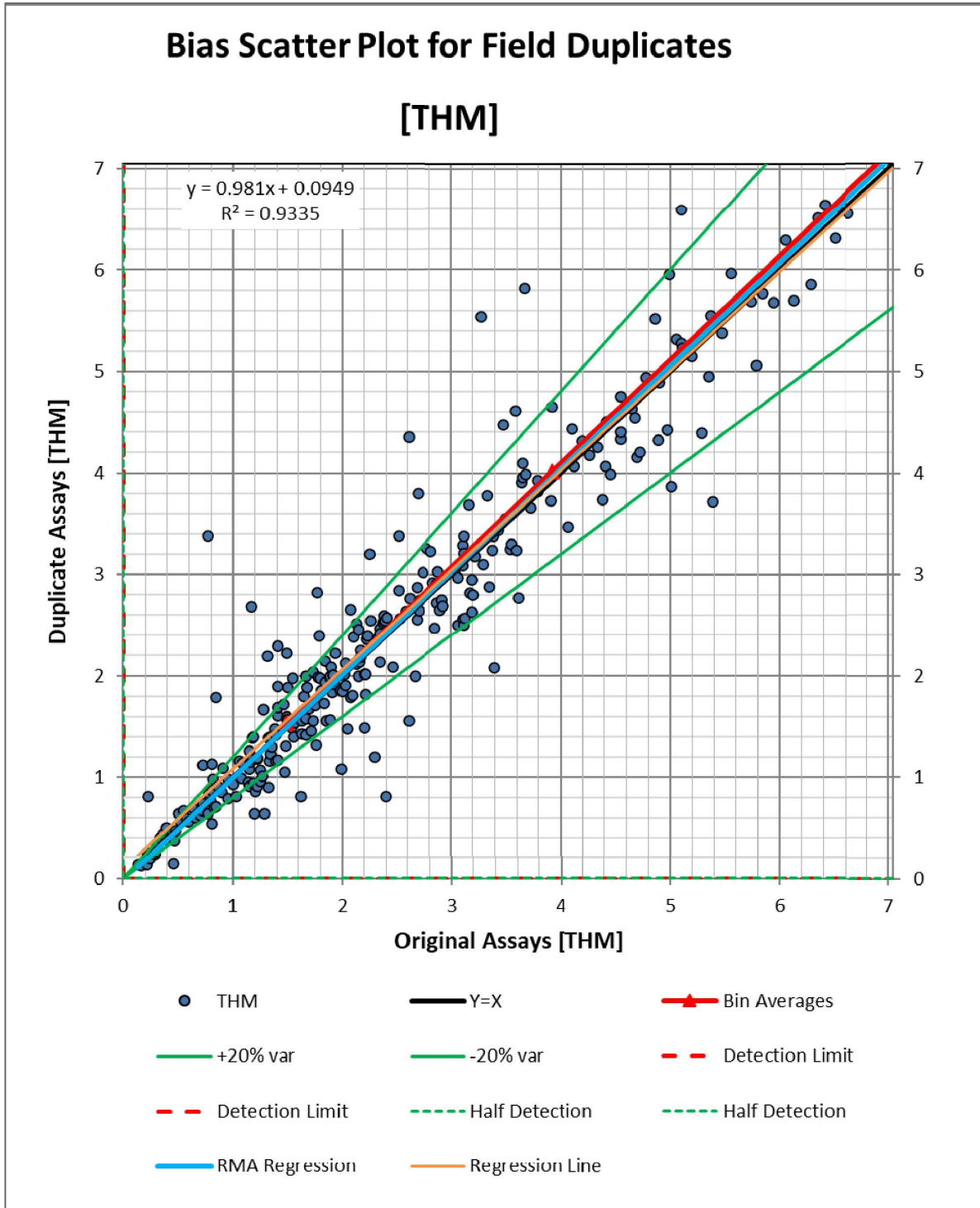
Figure 9.8 Scatter plotting of field duplicate slimes values



Source: AMC, 2016.

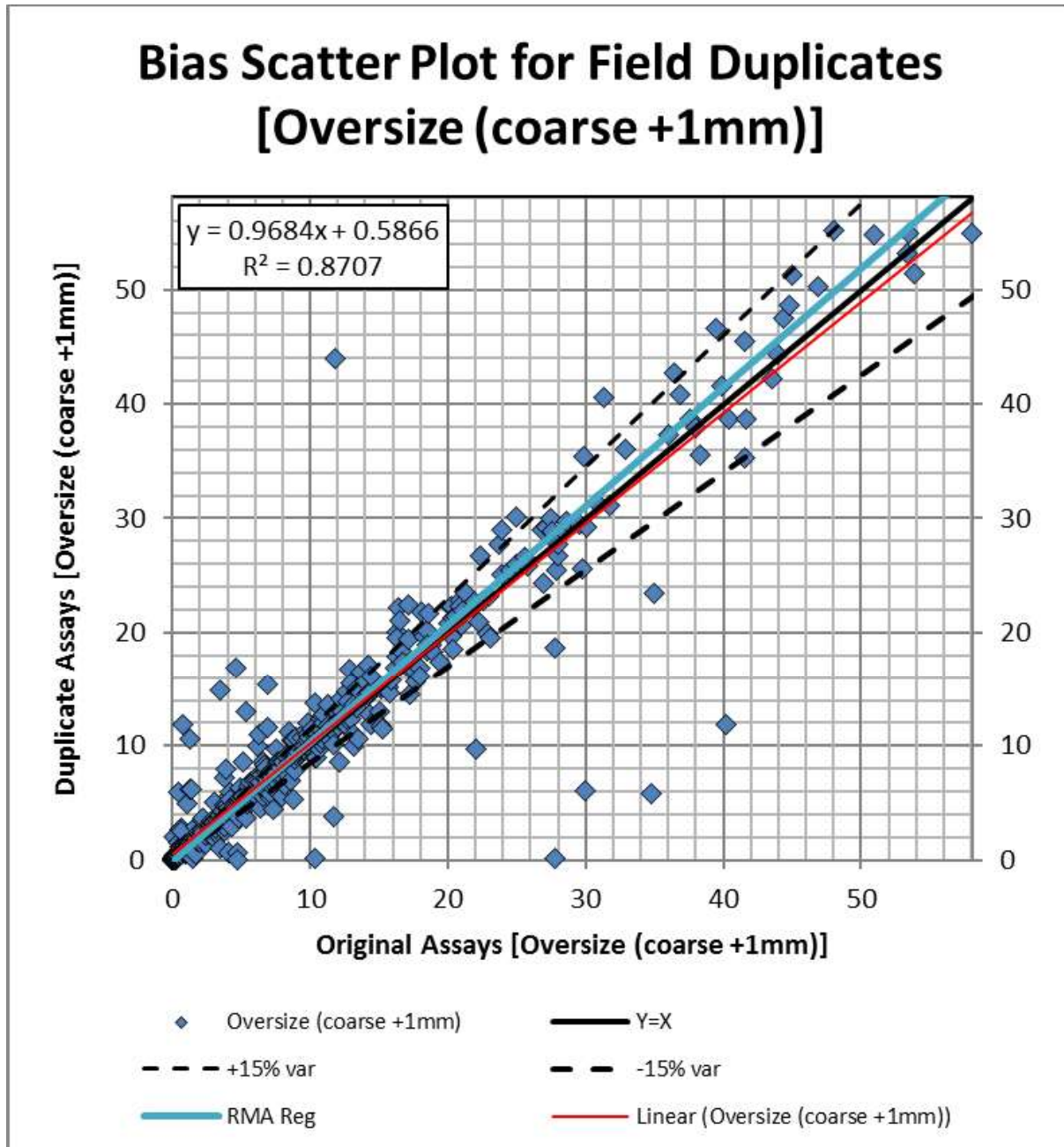


Figure 9.9 Scatter plotting of field duplicate THM values



Source: AMC, 2016.

Figure 9.10 Scatter plotting of field duplicate oversized material



Source: AMC, 2016.

#### 9.5.1.4 Internal reference sample

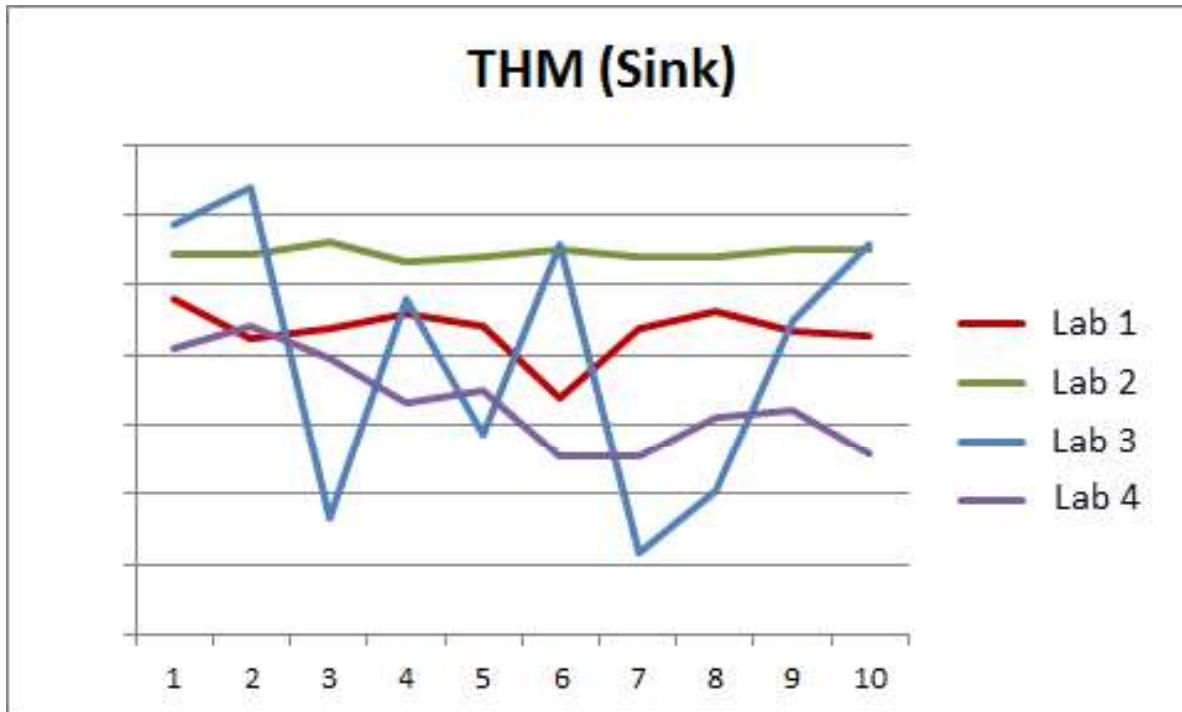
Given that there are no commercially available reference materials for HMS deposits, MEIML created an internal reference standard (IRS). To create the IRS, a one-tonne bulk sample, from Mpyupyu, was cone-and-quartered and cross-blended multiple times and then split using a 50-50 riffle splitter to produce roughly 1,000 one kg samples for use in the MEIML's QA/QC programme. For convenience this material is referred to as a standard; however, it was not certified.

Calibration of the IRS used four separate laboratories with ten samples sent to each for analysis.



Variable THM results were received from the four different laboratories used to do the initial reference sample calibration (Figure 9.11).

Figure 9.11 Variable THM results from the four different laboratories used to do the initial reference sample calibration

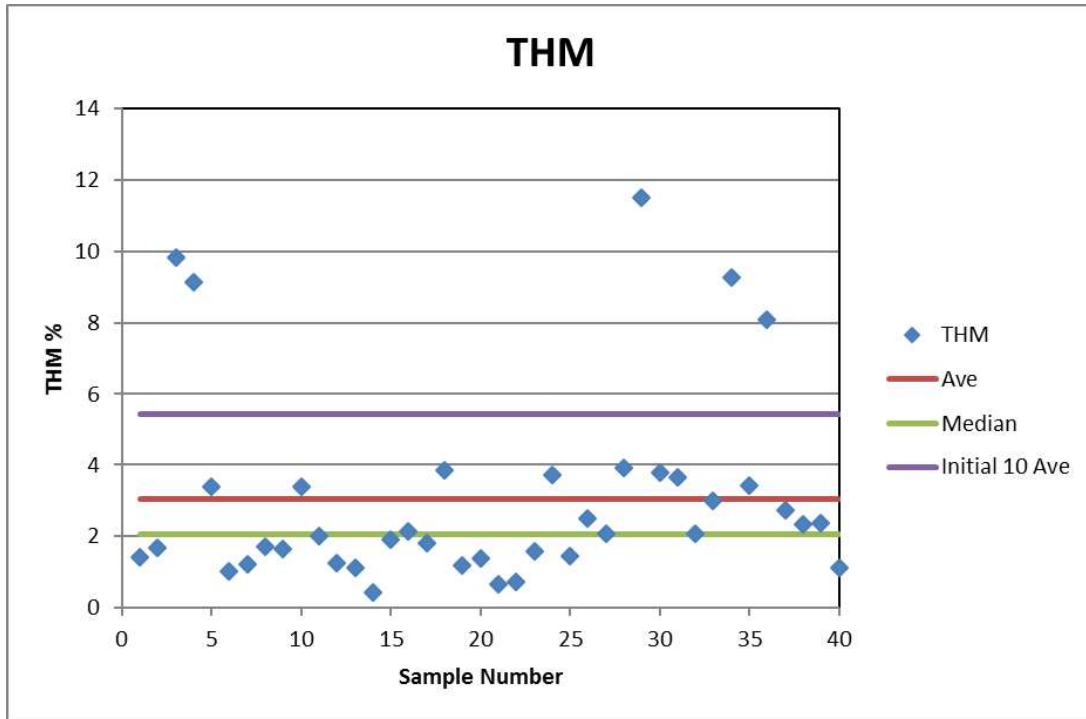


Source: AMC, 2016.

MEIML decided to continue submitting the IRS as part of the sampling programme and develop an expected value and variance over time. Due to the random selection of the standards from the sample lot, it was thought, by MEIML, that it would be to be a bias in the samples themselves. It was further assumed by MEIML that any bias or high variance would likely be due to analytical error.

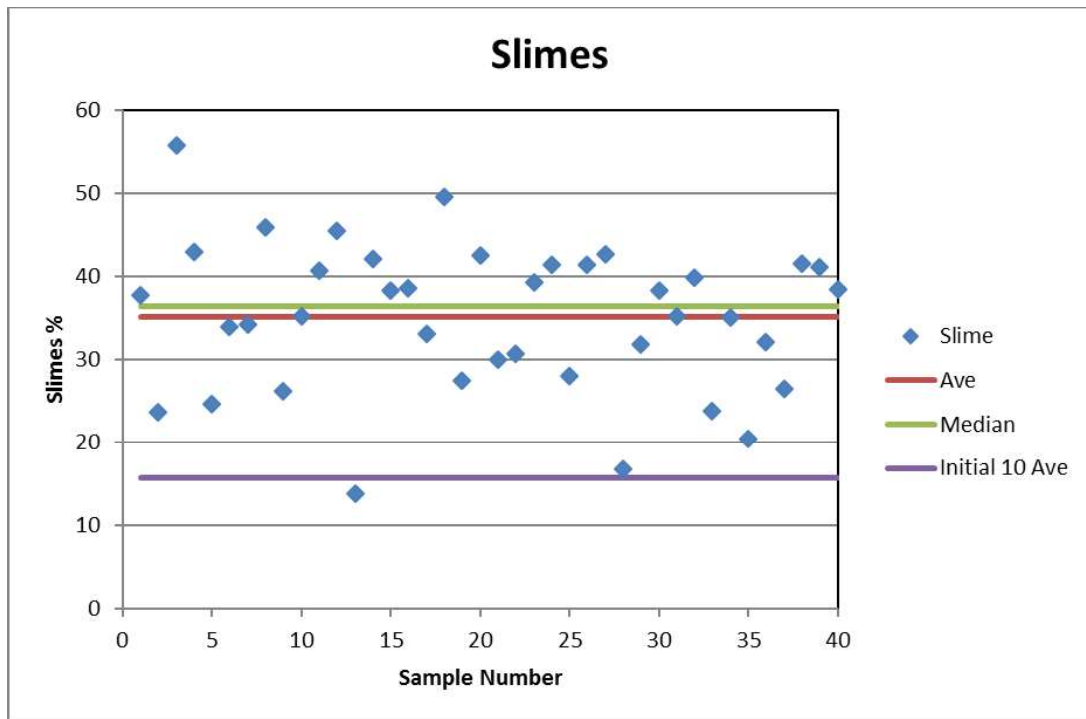
In August 2016, MEIML geologists noted anomalously high slimes values (>30%) for material that should have been below 10% slimes. To determine where the apparent error was occurring, AMC compared SGS's initial assay values for the IRS with the assay results of 40 samples that were in the batches of samples that had been queried as having excessive slimes (Figure 9.12 and Figure 9.13).

Figure 9.12 Plot showing results of 40 IRS values for THM versus the average of the initial ten SGS IRS results



Source: AMC, 2016.

Figure 9.13 Plot showing results of 40 IRS values for slimes versus the average of the initial ten SGS IRS results



Source: AMC, 2016.

Following additional investigation and analysis, AMC concluded that there was a significant issue with the SGS analytical results, with slimes biased high and THM biased low. SGS was informed of the results and agreed to reanalyse all the, potentially, compromised samples.

This was completed and AMC has re-estimated the resources for the deposits using the updated assay results. All other estimation parameters the same.

AMC is of the opinion, however, that the classification of the MRE should remain at the Inferred level of confidence as independent validation checks were not carried out on SGS's work.

**9.5.1.5 Umpire samples**

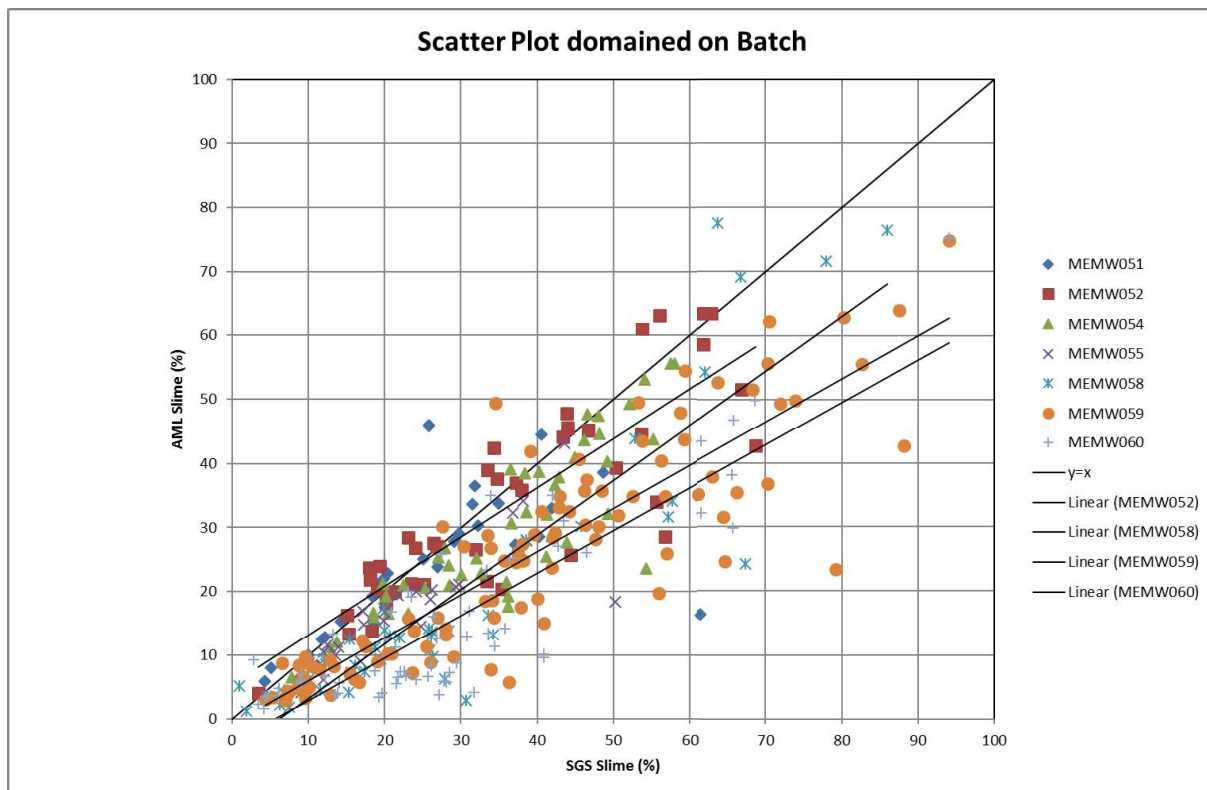
Umpire samples were used to test the reliability and accuracy of the primary laboratory (SGS) by testing a duplicate sample in another laboratory (AML) using an identical or equivalent analytical process.

Of the 7,599 samples submitted to SGS for primary analysis, 422 (5.6% of the analytical database) of the samples were duplicated and sent to AML.

Figure 9.14 and Figure 9.15 shows a clear high-slimes and lower THM bias for the SGS assays when compared to the AML umpire results. The oversize scatter plots (Figure 9.16), while exhibiting a wide scatter, does not appear to have any specific bias.

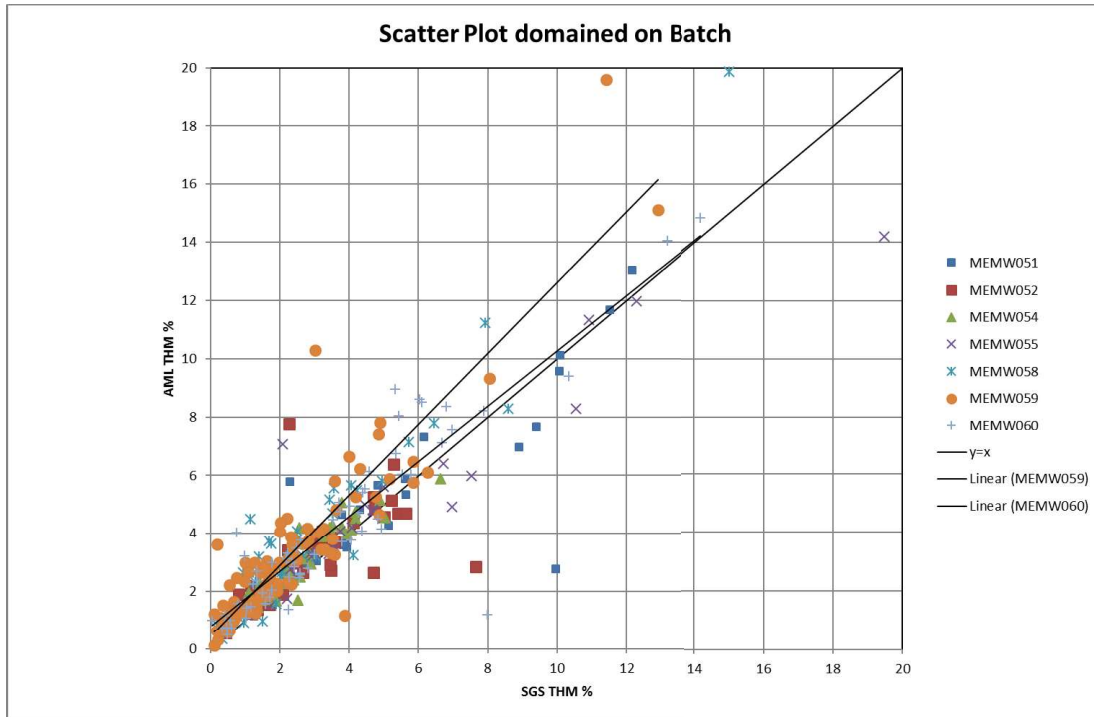
It is evident from these plots that there was a significant issue with the SGS analytical results with slimes biased high and THM biased low.

Figure 9.14 Scatter plot, grouped by batch number, of slimes values for AML umpire sample versus SGS primary sample



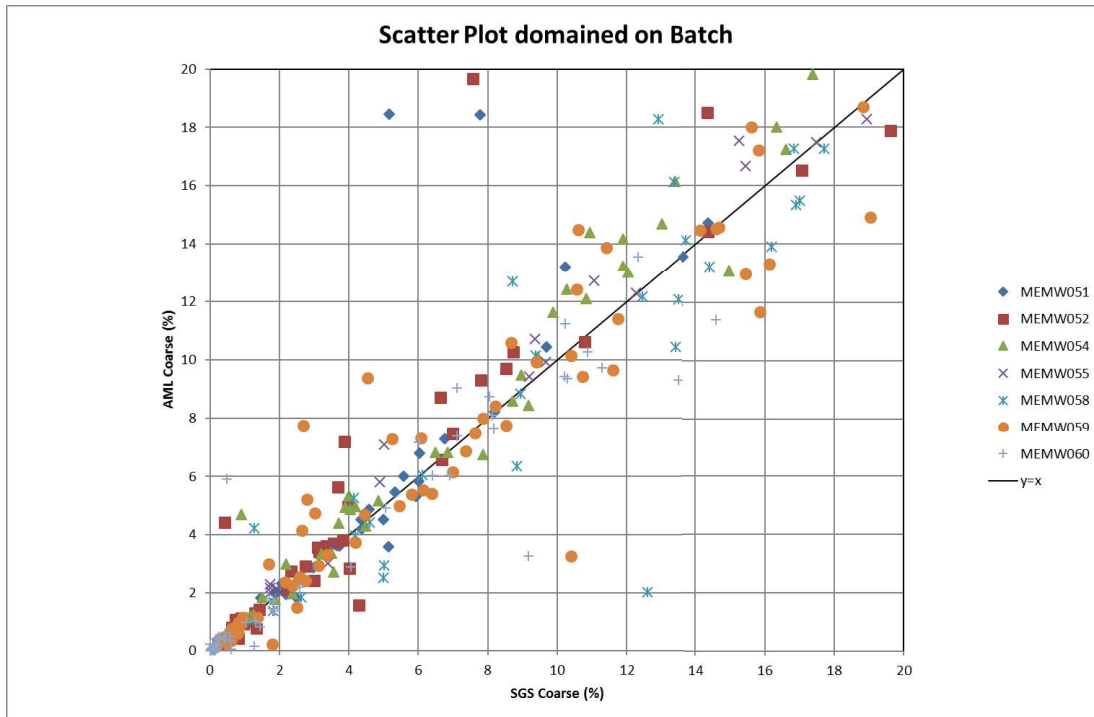
Source: AMC, 2016.

Figure 9.15 Scatter plot, grouped by batch number, of THM values for AML umpire sample versus SGS primary sample



Source: AMC, 2016.

Figure 9.16 Scatter plot, grouped by batch number, of oversize (coarse +1 mm) values for AML umpire sample versus SGS primary sample



Source: AMC, 2016.

AMC believes that the available information for the umpire laboratory analyses revealed material analytical bias and that classification of Mineral Resources should be at the Inferred classification category.

## **9.6 Competent Person's comments**

It is AMC's opinion that MEIML implemented a reasonable QA/QC programme that performed as-intended by identifying a significant analytical error at the primary laboratory. When preparing the 2016 MRE, AMC was of the opinion that the laboratory results from SGS are biased and not representative and should be re-assayed with a full QA/QC programme and that the bias must be taken into account when classifying any resource estimates based on this data.

AMC has used the re-assayed data for the MRE that forms the basis of this IGR, however remains of the opinion that the Mineral Resource classification level be retained at the Inferred level of confidence as no independent validation checks were undertaken on the new assay data.

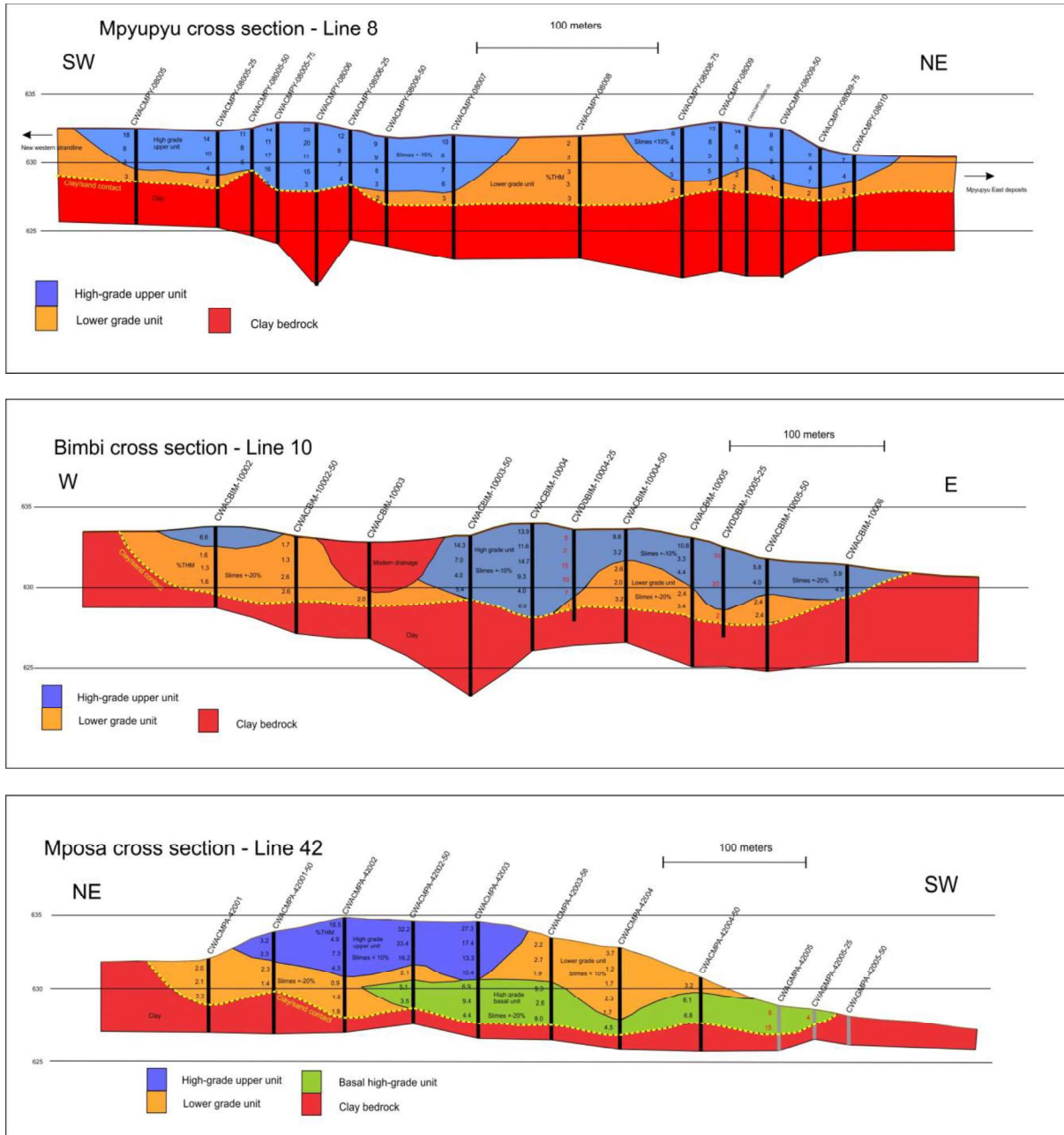
## 10 Geological interpretation and modelling

### 10.1 Geological interpretation

Cross-strike geological sections of the deposits were created in Geosoft™ software for each of the exploration drilling lines and were used as a tool to develop a geological model based on THM grade, slimes content, and lithology.

Examples for Mpyupyu, Bimbi, and Mposa are shown in Figure 10.1.

Figure 10.1 Sections through Mpyupyu, Bimbi, and Mposa.



Source: AMC, 2016.

The geological interpretations attempted to domain the drilling data into [low slimes+high THM], [medium slimes], and [high slimes+low THM] domains. The contact between the strandline sand deposits and the clay bedrock could, in most cases, could be identified clearly in the sections. In some cases, however, drilling did not intersect the clay/sand contact and assumptions on the contact had to be made based on the surrounding drilling results.

To assist in defining the domains, a THM cut-off grade of 1.0% THM, in conjunction with the following lithological codes was used:

- CLY – clay.
- CLSI – clayey silt.
- GRCL – gravelly clay.
- STCL – silty clay.

## 10.2 Geological modelling

- 121 vertical cross-sections were interactively interpreted and simplified into an upper [low slime+ high THM] (>1.0% THM), and a lower unit with [high slimes + low THM] (<1.0%THM).
- The generated strings were used to create three-dimensional (3D) solids for use in the estimation process.

The following procedures were used to interpret the mineralization/domains:

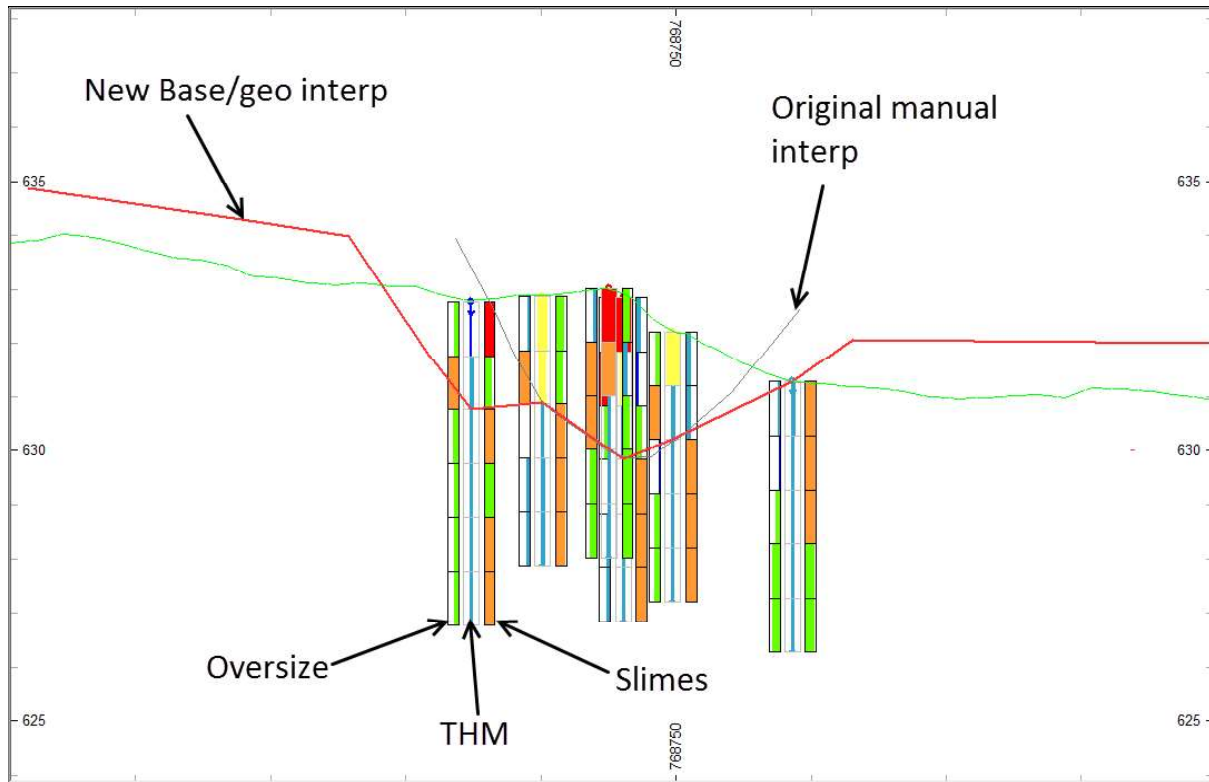
- Each cross-section was displayed on screen with a clipping window equal to half the distance between drillhole lines.
- Interpreted strings were snapped to drillhole intervals, using THM % grade composites as a guide.
- Where the mineralized body did not extend to the adjacent drillhole section, it was projected halfway to the next section and terminated with a flat end. The general thickness, orientation and dip of the unit was maintained.
- Where mineralized units were terminated along-strike, the wireframe was terminated halfway between the barren and mineralized intersections with no reduction in thickness.
- Extrapolations along-strike at the deposit extremities were made over distances of either half the distance between drillholes or half the distance between drillholes lines.
- If the mineralized body was interpreted to extend to surface, the wireframe was extended above the topography at the same width as the last mineralized intersection. Extending the wireframe above the topography was to ensure there would be no gap between the mineralized body and the topography when the block model was built.

The geological interpretations were used to create a 3D geological model using Datamine RM™ software where resource volumes and THM grades were estimated.

It was not always possible to convert some of the sectional interpretations into usable 3D models for data and volumetric constraints. This was due to fact that the sectional (geological) interpretations were based on visual estimates of slimes and THM from drilling and were not always aligned with the assay results.

Where this conflict occurred, a new interpretation was generated by AMC that best matched the 3D configuration of the data and the field interpretation was discarded (Figure 10.2).

Figure 10.2 Example of a revised sectional interpretation for Bimbi (not to scale)



Source: AMC, 2016.

The simplification of the modelling resulted in two domains — an upper low slime, high THM, and a lower unit with high slimes and low THM. Oversize was not considered during the modelling exercise.



## 11 Mineral Resource estimation and classification

### 11.1 Data used for MREs

AMC used the data it had available from the 2016 MRE and combined this with the updated data set provided by LGM (Table 11.1). AMC coded both the old and new samples and merged the data sets. The samples were coded as RESAMPLE, PRIMARY, or was left blank if no information was available. Where samples are recorded as having been re-sampled, the updated THM, slimes and coarse grades were applied to the sample data set.

Table 11.1 Summary of the AC holes imported into Datamine™

	Number of holes	Total metres	Average sample interval	Depth	
				Minimum	Maximum
				m	m
Bimbi and North East Bimbi	294	1,718	1	4	12
Mpyupy	406	2,794	1	2	17
Mposa	340	2,122	1	2	11
North Chilwa (Halala)	327	2,357	1	2	24

Source: AMC, 2016.

Validation of the data was then undertaken by AMC which included checks for:

- Duplicate drillhole names.
- One or more drillhole collar coordinates missing in the collar file.
- FROM or TO missing or absent in the assay files.
- FROM > TO in the assay files.
- Sample intervals are not contiguous in the assay file (gaps exist between the assays).
- Sample intervals overlap in the assay files.
- First sample is not equal to 0 m in the assay files.
- Total depth of the holes is less than the depth of the last sample.

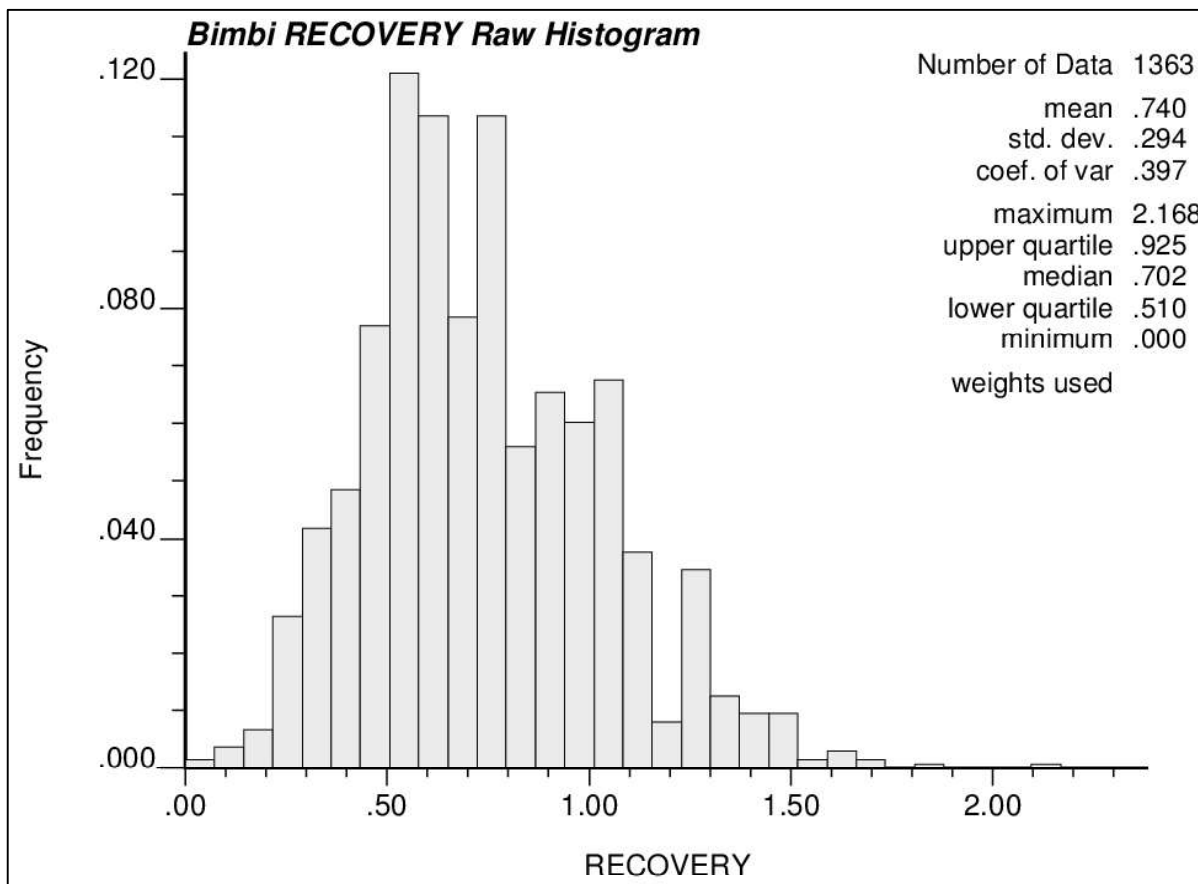
All drillholes were shallow (8 m average depth) and all holes were assumed to be vertical. The database validation processes did not identify any critical errors in all supplied databases. AMC did not introduce any changes in the database. The topography DTM was validated to make sure that it covered the areas of the modelled deposit. Drillhole collars were found to match with the topography surface.

The Competent Person believes that the available database is industry standard and suitable for the MREs.

### 11.2 Sample recovery

General guidance within the mineral sands industry is that a minimum recovery of 70%, for each interval, is required for a high-quality sample. AMC noted that the majority of the samples have recoveries less than 70%, an example for the Bimbi AC drilling is shown in Figure 11.1.

Figure 11.1 Histogram of recovery for Bimbi AC drilling



Source: AMC, 2016.

Sixteen percent of the samples display recoveries of more than 100%, this is ascribed to cavitation and or residual material in the sample recovery circuit.

Diamond drilling results were not reported as they are not used in the resource estimation.

A weak positive correlation between recovery and slimes as well as a weak negative correlation between THM and oversize were noted. This is thought, by AMC, to relate to slimes improving material cohesion and aiding recovery, with the weak negative correlation probably being related to winnowing.

### 11.3 Density data

Density samples were taken according to MEIML internal geotechnical standards that, in AMC's opinion, were compatible with normal industry practice.

In situ wet and dry densities were determined using the sand-cone method. A pit was dug at a selected location, a sample was taken and retained from a uniformly shaped hole at the base of the pit. The sand-cone device was placed over the hole and a pre-weighed amount of sand was fed into the device (it has a known volume) filling the hole and the device. The remaining sand in the container was weighted and a volume was back calculated (the sand's density is known). The mass of the retained sample and the volume of the sand gives the wet in situ density of the selected sediment type. Drying the sample and recalculating the weight then provides the dry in situ density. The data from the density measurements were captured in the field on hardcopy data sheets and then transferred into Microsoft Excel™.

Sixty-four bulk density samples were taken, with an average bulk density calculated and used per deposit, in the resource calculations due to the variable sedimentological make-up of each deposit. The bulk density values range from 1.49 t/m<sup>3</sup> at North Chilwa (which is dominated by free-flowing sands) to 1.78 t/m<sup>3</sup> at North-East Bimbi (which is dominated by sandy clays and clayey sands).

The averaged bulk density values per deposit are summarized in Table 11.2 with a breakdown of bulk density per sediment type given in Table 11.3. Loamy sand (LOSA) has the lowest average bulk density at 1.564 t/m<sup>3</sup> while the gravels and silts (STL – limited data) have the highest bulk densities, however, are poorly supported (2 and 1 samples respectively).

Note: All densities are dry densities.

Table 11.2 Summary statistics of average dry density (t/m<sup>3</sup>) per deposit

Deposit	No. Samples	Min.	Max.	Average
Mposa	24	1.394	1.850	1.653
Mpyupyu	21	1.581	2.019	1.726
Bimbi Main	14	1.401	2.001	1.699
NE Bimbi	2	1.670	1.897	1.784
N Chilwa	3	1.405	1.584	1.490

Table 11.3 Summary statistics of dry density per logged soil type, ranked on average density

Soil Type	Description	No. Samples	Min.	Max.	Average
LOSA	Loamy sand	2	1.480	1.647	1.564
CLL	Clayey loam	4	1.401	1.765	1.602
SAN	Sand	22	1.394	1.850	1.644
CLY	Clay	4	1.581	1.819	1.651
SAS	Sandy silt	4	1.538	1.834	1.701
SISA	Silty sand	18	1.405	2.019	1.711
CLSA	Clayey sand	3	1.722	1.779	1.751
CLSI	Clayey silt	4	1.670	1.897	1.766
GRA	Gravel	2	1.732	1.828	1.780
STL	Silt	1	1.940	1.940	1.940

Source: AMC, 2016.

#### 11.4 Statistical analysis

After completing interpretation of the lithological and grade domains and constructing wireframe models, classical statistical analysis was repeated for those samples from within each lithological zone or grade domain. The purpose of the analysis was:

- To determine if mixed populations were present.
- To determine if retaining was required if mixed populations were identified.

Statistical analyses were undertaken for all modelled elements in each domain and are presented in Table 11.4.

Table 11.4 Statistical summary of the modelled elements per deposit and defined geological domain (MINZONE)

Deposit	Domain	Attribute	No. Samples	Mean	Std Dev	Var	CoV	75%	50%	25%
NE Bimbi	3	Slimes	174	4.98	5.84	34.11	1.17	5.38	3.13	1.76
NE Bimbi	3	Coarse	174	18.85	6.34	49.18	0.34	22.58	18.53	14.34
NE Bimbi	3	THM	174	2.61	1.28	1.64	0.49	3.09	2.35	1.82
NE Bimbi	4	Slimes	108	10.39	9.22	85.07	0.89	11.40	7.43	5.12
NE Bimbi	4	Coarse	108	35.35	11.58	134.17	0.33	41.14	34.69	28.38
NE Bimbi	4	THM	108	1.73	0.65	0.43	0.38	2.23	1.70	1.21
Bimbi	1	Slimes	740	17.27	12.72	161.84	0.74	24.58	13.64	7.48
Bimbi	1	Coarse	740	21.71	11.27	126.89	0.52	27.79	20.65	13.24
Bimbi	1	THM	740	5.41	4.22	17.77	0.78	6.30	4.13	2.90
Bimbi	2	Slimes	671	8.45	6.02	36.28	0.71	10.79	7.34	4.27
Bimbi	2	Coarse	671	44.21	9.50	90.23	0.22	50.37	44.74	37.47
Bimbi	2	THM	671	2.13	0.86	0.73	0.40	2.51	1.94	1.54
Mpyu	1	Slimes	427	13.78	10.44	109.02	10.44	0.76	10.92	5.64
Mpyupyu	1	Coarse	427	21.95	11.06	122.32	0.50	28.78	20.40	13.02
Mpyupyu	1	THM	427	6.52	4.55	20.74	0.70	8.23	5.60	3.10
Mpyupyu	2	Slimes	424	6.18	6.52	42.22	1.05	8.00	4.26	1.87
Mpyupyu	2	Coarse	424	42.85	14.91	222.20	0.35	54.07	42.09	32.71
Mpyupyu	2	THM	424	2.34	1.37	1.88	0.59	2.83	2.01	1.44
Mpyupyu	3	Slimes	473	5.38	4.52	20.41	0.84	6.80	4.24	2.41
Mpyupyu	3	Coarse	473	21.96	8.95	80.08	0.41	26.06	21.72	16.86
Mpyupyu	3	THM	473	4.17	2.10	4.42	0.50	5.30	4.03	2.85
Mpyupyu	4	Slimes	637	4.54	5.42	29.38	1.20	5.84	2.63	1.06
Mpyupyu	4	Coarse	637	44.23	17.96	322.63	0.41	56.02	41.24	30.31
Mpyupyu	4	THM	637	2.35	1.19	1.41	0.51	3.03	2.26	1.52
Mposa	1	Slimes	1964	17.26	13.84	191.42	0.80	25.54	14.11	5.90
Mposa	1	Coarse	1964	21.21	21.48	461.50	1.01	29.43	11.43	5.81
Mposa	1	THM	1964	3.67	5.53	30.60	1.51	4.45	2.29	1.19
Mposa	2	Slimes	32	8.39	7.31	53.46	0.87	10.73	6.45	3.57
Mposa	2	Coarse	32	54.09	23.92	572.06	0.44	73.32	61.16	25.18
Mposa	2	THM	32	1.07	0.81	0.65	0.75	1.26	0.76	0.51
Mposa	3	Slimes	114	38.21	23.56	545.61	0.61	56.74	43.09	12.65
Mposa	3	Coarse	114	14.42	15.67	245.45	1.09	14.26	7.93	5.23
Mposa	3	THM	114	1.29	1.32	1.73	1.02	1.57	0.85	0.47
N Chilwa	1	Slimes	422	1.61	12.97	168.33	0.95	20.72	9.57	3.74
N Chilwa	1	Coarse	422	43.91	14.05	197.39	0.32	53.00	42.19	33.06
N Chilwa	1	THM	422	1.90	2.03	4.10	1.07	2.49	1.17	0.57
N Chilwa	2	Slimes	1184	4.67	9.31	86.64	1.99	4.78	0.48	0.12
N Chilwa	2	Coarse	1184	15.37	16.61	275.80	1.08	21.31	7.37	4.89
N Chilwa	2	THM	1184	3.21	2.55	6.52	0.80	4.39	2.58	1.30
N Chilwa	3	Slimes	90	9.68	11.97	143.36	1.24	16.50	4.16	0.19
N Chilwa	3	Coarse	90	35.36	15.56	242.07	0.44	45.73	32.53	23.66
N Chilwa	3	THM	90	1.73	1.21	1.47	0.70	2.61	1.25	0.74
N Chilwa	4	Slimes	209	4.27	7.78	60.46	1.82	4.86	0.77	0.27
N Chilwa	4	Coarse	209	24.53	9.90	99.07	0.40	29.45	23.78	18.44
N Chilwa	4	THM	209	2.41	1.50	2.25	0.62	3.36	2.18	1.21

### 11.5 Topography

The surface topography was constructed from collar data and some limited survey lines in Datamine RM™ and was used to limit the vertical extent of the block models.

### 11.6 Drillhole data and length compositing

Selecting and coding drillhole data is a standard process for ensuring that correct data are used in statistical and geostatistical analyses. For this purpose, wireframe surface models for each deposit lithological zone were used consecutively to select drillhole assays. Samples within the 3D wireframes were flagged based on the area (deposit) as well as the modelled geological domain (MINZONE) that the assay values fell within.

As AC drillhole samples were taken every metre, compositing was not required.

### 11.7 High-grade cutting

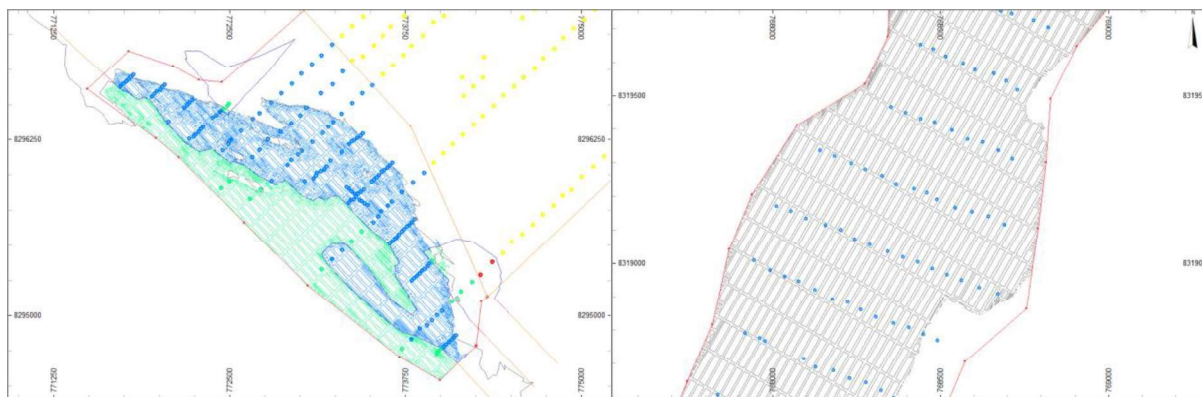
A review of grade outliers was undertaken to ensure that extreme grades are treated appropriately during grade interpolation.

No high-grade cutting was applied as it was not considered necessary at this stage of the Project.

### 11.8 Block models

Each deposit had a unique block model, prepared based on data spacing and orientation of dune lines and mineralization trends. Examples of the Mpyupyu and Halala models are presented in Figure 11.2.

Figure 11.2 Examples of the models for Mpyupyu (left) and Halala (right)



Source: AMC, 2016.

The block model cells were created at half the average drill spacing along and across the mineralization trends with the long axis of the blocks aligned with the known mineralization trends. The details of the Project block models are shown in (Table 11.5).

Table 11.5 Block model details

		Origin UTM	Cell Size (m)	Number of Cells	Range (m)	Rotation degrees
Bimbi	East	766,000	20	200	4,000	None
	North	8,301,500	50	120	6,000	
	RL	615	1	25	25	
Northeast Bimbi	East	766,000	100	200	20,000	None
	North	8,301,500	125	120	15,000	
	RL	615	1	25	25	
Mpyupyu	East	773,757	50	121	6,050	316 on Z axis
	North	8,294,199	150	23	3,450	
	RL	387	1	471	471	
Mposa	East	766,856	25	55	1,375	30 on Z axis
	North	8,317,444	100	82	8,200	
	RL	497	1	263	263	
Halala	East	774,564	50	32		62 on Z axis
	North	8,339,226	100	95		
	RL	468	1	331		

Source: AMC, 2016.

The models were sub-celled to provide the best-fit along boundaries. Due to the nature of the mineralization and high variability of grades in vertical direction, it was decided to use thin blocks (1 m high) to match the sample length and the expected selectivity.

### 11.9 Estimation methodology

Estimation of slimes, THM, and oversize grades into the block models for each of the deposits was undertaken using Datamine RM™ software.

Inverse distance to the power of two (ID<sup>2</sup>) was used in the 2016 as well as the 2021 update to interpolate the block grades into the models. ID<sup>2</sup> is a generally used interpolator and with the appropriate levels of anisotropy applied to the estimation neighbourhood, can provide reasonable estimates for the type of deposits found on the Project.

The estimation neighbourhood parameters are summarized in Table 11.5.

Table 11.6 Chilwa estimation neighbourhood parameters

	Samples		Search Radii (m)			Second Pass Search			Third Pass Search			Orientation	
	Min.	Max.	Major	Minor	Vertical	Radii Multiple	Min.	Max.	Radii Multiple	Min.	Max.		
Bimbi	3	15	600	150	1	5	5	20	10	10	20	Fixed	North-South
North East Bimbi	3	15	600	150	1	5	5	20	10	10	20	Fixed	North-South
Mpyupyu	3	15	600	150	1	5	5	20	10	10	20	Dynamic anisotropy	
Mposa	3	15	200	75	1	5	5	20	10	10	20	Dynamic anisotropy	
Halala	3	15	300	100	1	5	5	20	10	10	20	Dynamic anisotropy	

Source: AMC, 2016.

The orientation of the search ellipses was defined during estimation using dynamic anisotropy. This allows for orientation information to be stored in the block model and used at the point of estimation to orientate the search ellipse along specified orientations.

For the estimations of Mpyupyu, Moposa, and Halala, strike strings (defining the orientation of the dune / mineralization crest and trend lines) were digitized and the orientation data estimated into the respective models. The exceptions to the use of dynamic anisotropy were Bimbi and Northeast Bimbi (NEB) for which fixed search ellipses orientated north-south were used.

To set up the dynamic search, it was necessary to assign azimuth, plunge and dip values to each cell in the block model.

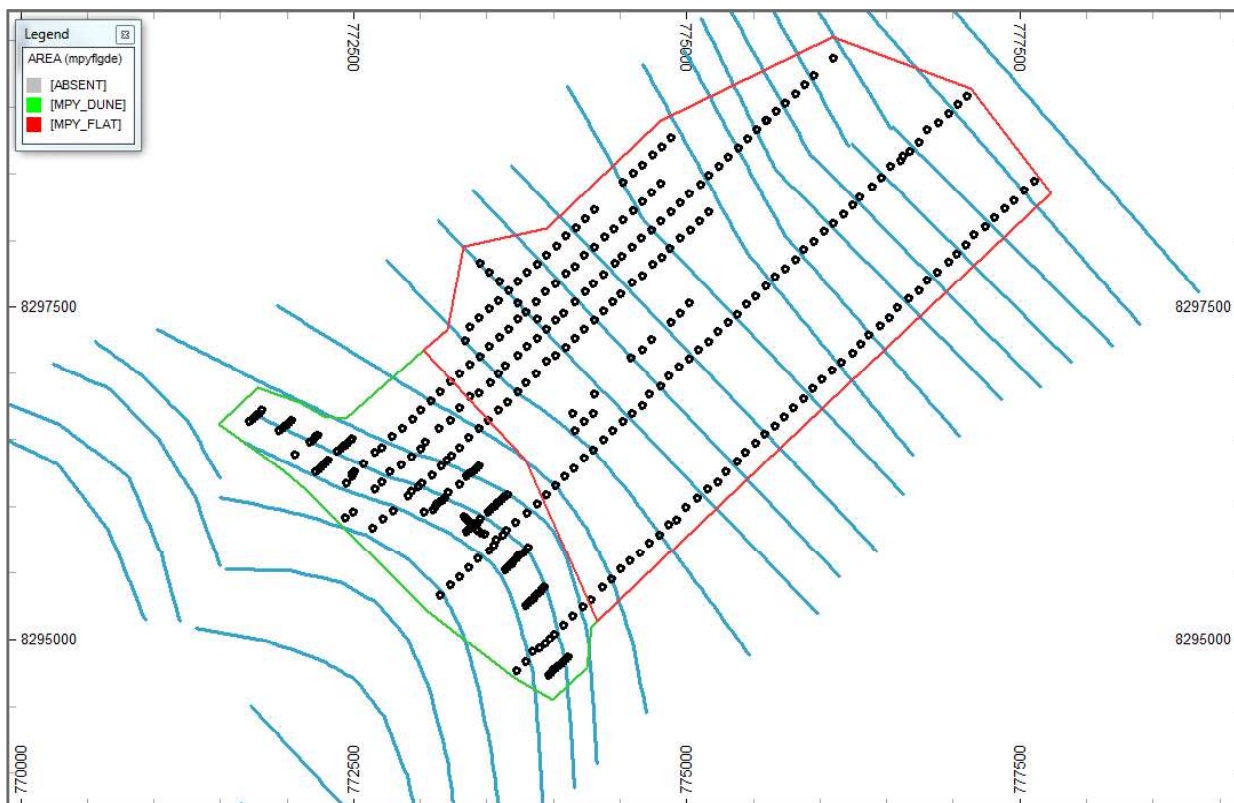
This was done using the following methodology:

- A set of strings was created (digitized interactively) for every 100 m spaced section in plan for the azimuth.
- When all strings for azimuth were created, they were "normalized", i.e. points were inserted in such a way that the distance between points along strings would not be greater than 20 m.
- Inclination for each pair of points along strings that were created along the deposit strike was calculated and recorded in the string files.
- All calculated values for strings were checked to have correct positive or negative values and corrected if it was necessary.
- The resultant strings were used to interpolate strike azimuth values into each cell of the block model separately for each deposit. A spherical search was employed for this process.
- Dip and plunge values were defaulted to 0° in the models.

The resultant block models had assigned azimuth, dip, and plunge values for each model cell, which represented the general directions of mineralized structures.

Figure 11.3 to Figure 11.5 illustrates the strike strings used.

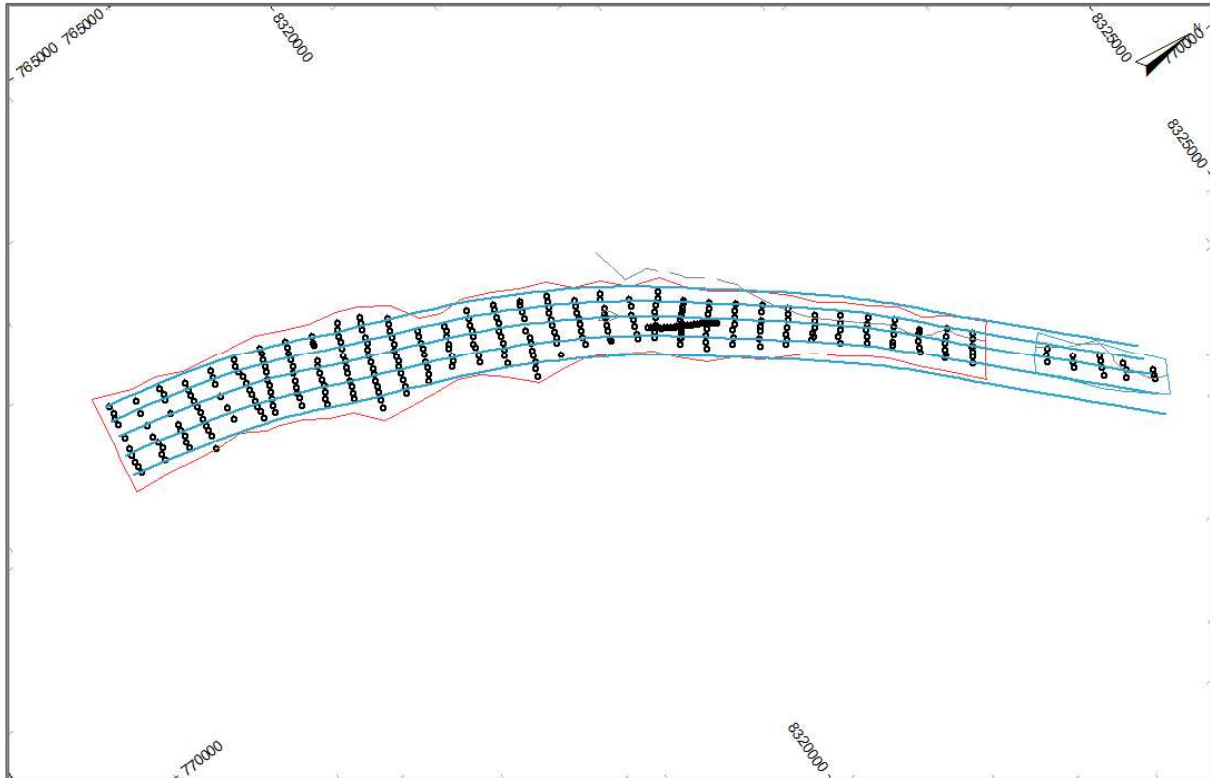
Figure 11.3 Strike lines used for Mpyupyu used for dynamic anisotropy



Source: AMC, 2016.

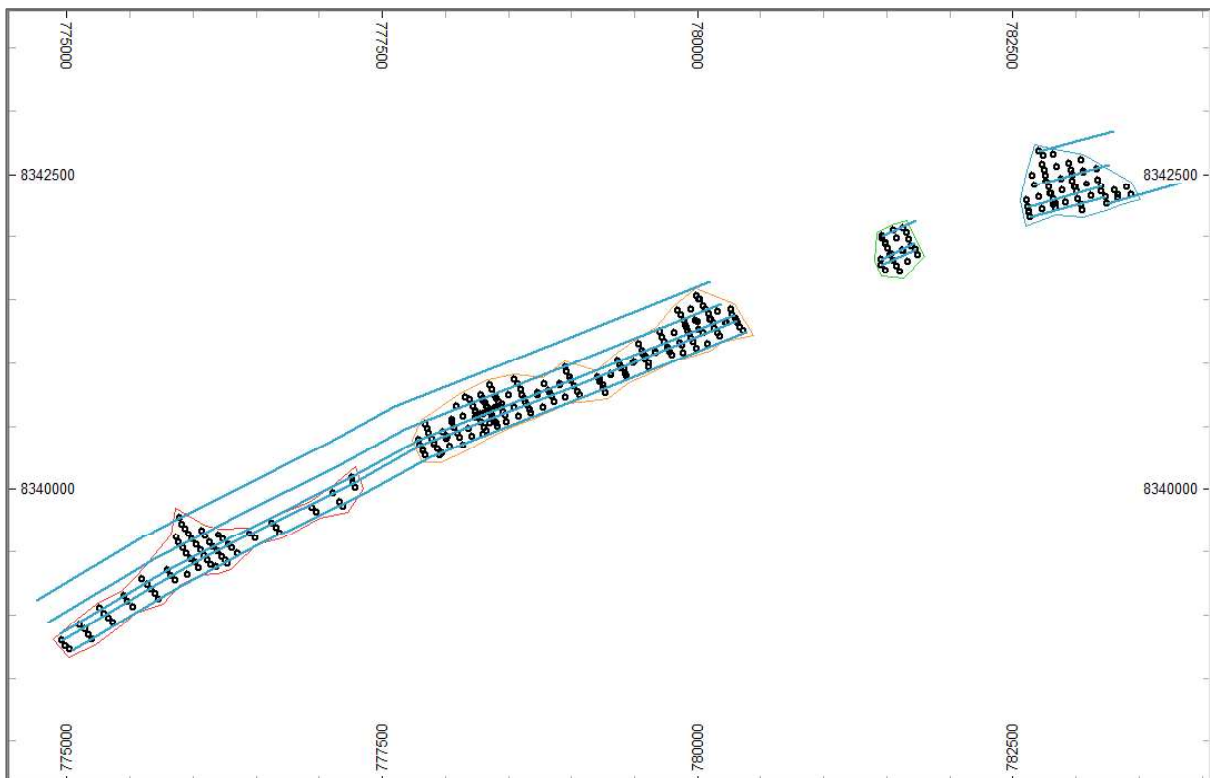


Figure 11.4 Strike lines used for Mposa used for dynamic anisotropy



Source: AMC, 2016.

Figure 11.5 Strike lines used for Halala used for dynamic anisotropy



Source: AMC, 2016.



### 11.10 Estimation validation

Validation of the models was based on a three-step process. The models were all reviewed in section with the drilling data overlain and the data coloured on THM, slimes or oversize. The aim was to visually compare models to the drilling data to ensure that there were no estimation artifacts or anomalies and that the model grade distributions reasonably followed those of the drillholes.

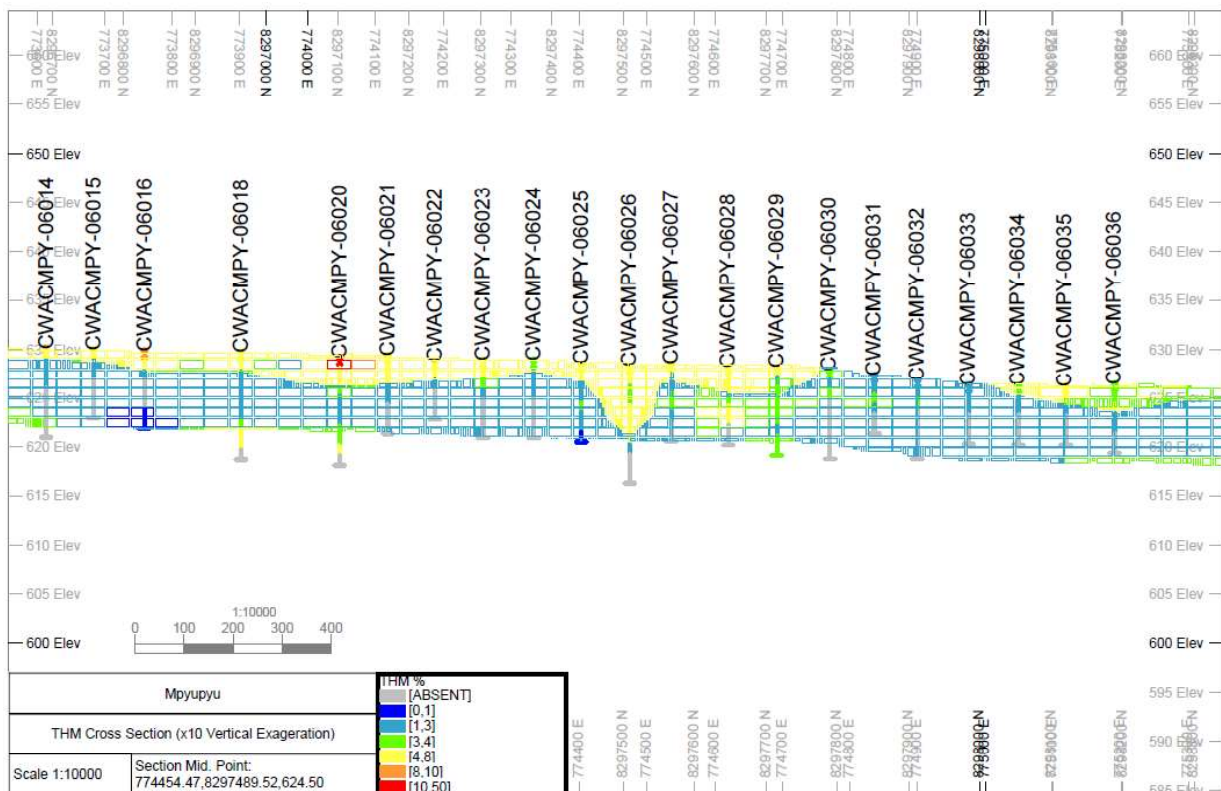
- Visual checks on screen in cross-section and plan view to ensure that block model grades honour the grade of sample composites.
- Statistical comparison of sample and block grades.
- Generation of swath plots to compare input and output grades in a two-dimensional process by easting, northing and elevation.

#### 11.10.1 Visual validation

Firstly, the models were all reviewed in section with the drilling data overlain and the data coloured on THM, slimes or oversize. The aim was to visually compare models to the drilling data to ensure that there were no estimation artifacts or anomalies and that the model grade distributions reasonably followed those of the drillholes.

An example of a visual validation, for Mpyupyu is shown in Figure 11.6.

Figure 11.6 Example of a visual validation (Mpyupyu)



Source: AMC, 2022.

### 11.10.2 Statistical validation

The second of the validation procedures was purely statistical with the length and volume weighted statistics of the drilling data and estimate models calculated per domain to ensure that there was no global overestimation or underestimation.

The results per deposit and defined geological zone (MINZONE) are presented in Table 11.7 below. In general, the results were deemed to be acceptable, however Bimbi MINZONE1 is overestimated by 17%. AMC does not consider this to be material, given that CML will be re-drilling, re-assaying and re-estimating all of the deposits using data derived from Sonic drilling.

Table 11.7 Comparison statistics for the mean drillhole data versus block model estimate per deposit and MINZONE

Deposit	MINZONE	Naïve	Estimate	% Difference
Bibi	M1	5.41	4.62	-17.10
	M2	2.13	2.29	6.99
Northeast Bimbi	M1	2.61	2.59	-0.77
	M2	1.73	1.78	2.81
Mpyupyu	M1	6.56	6.69	1.94
	M2	2.34	2.35	0.43
	M3	4.18	3.94	-6.09
Mposa	M1	17.26	16.89	-2.19
	M2	8.39	7.72	-8.68
	M3	38.21	38.93	1.85
North Shore Deposits	M1	1.9	1.75	-8.57
	M2	3.21	2.79	-15.05
	M3	1.73	1.86	6.99
	M4	2.41	2.38	-1.26

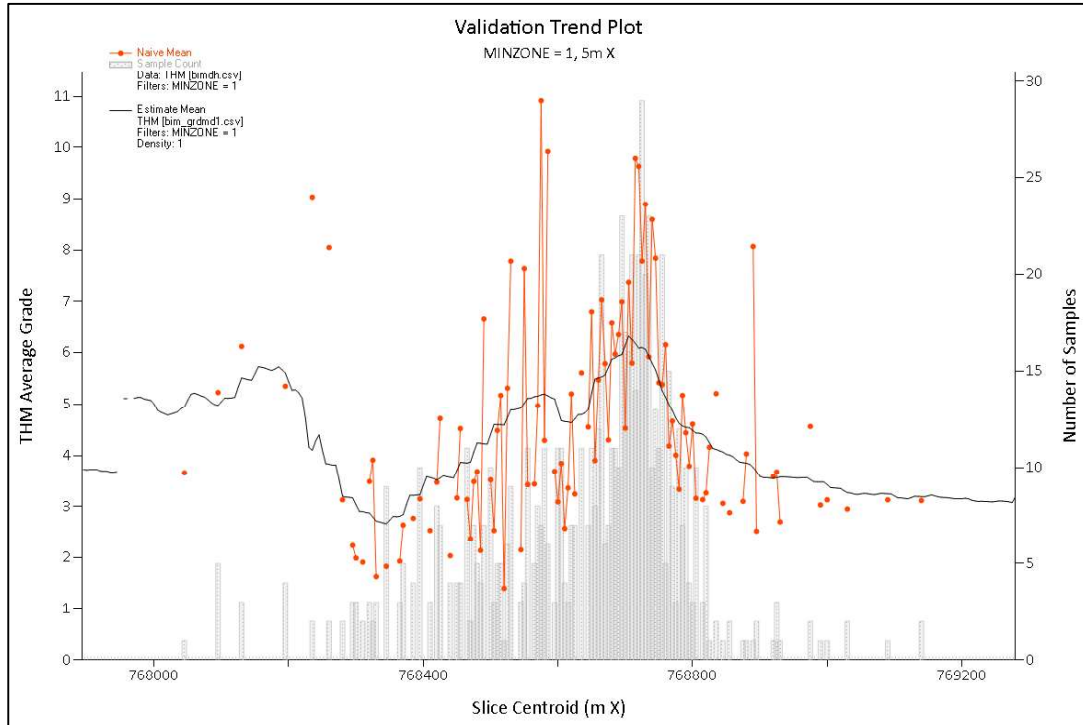
### 11.10.3 Swath plots

The final validation used a custom script system that calculated the weighted average grade of the model and the drilling data within a uniform grid based on two to three times the block model dimensions. The aim of this process is to test the models on a more local scale for significant overestimation or underestimation. The resulting model and plots are known as 3D variance plots and are akin to swath plots.

The estimates are considered acceptable, based on these validations.

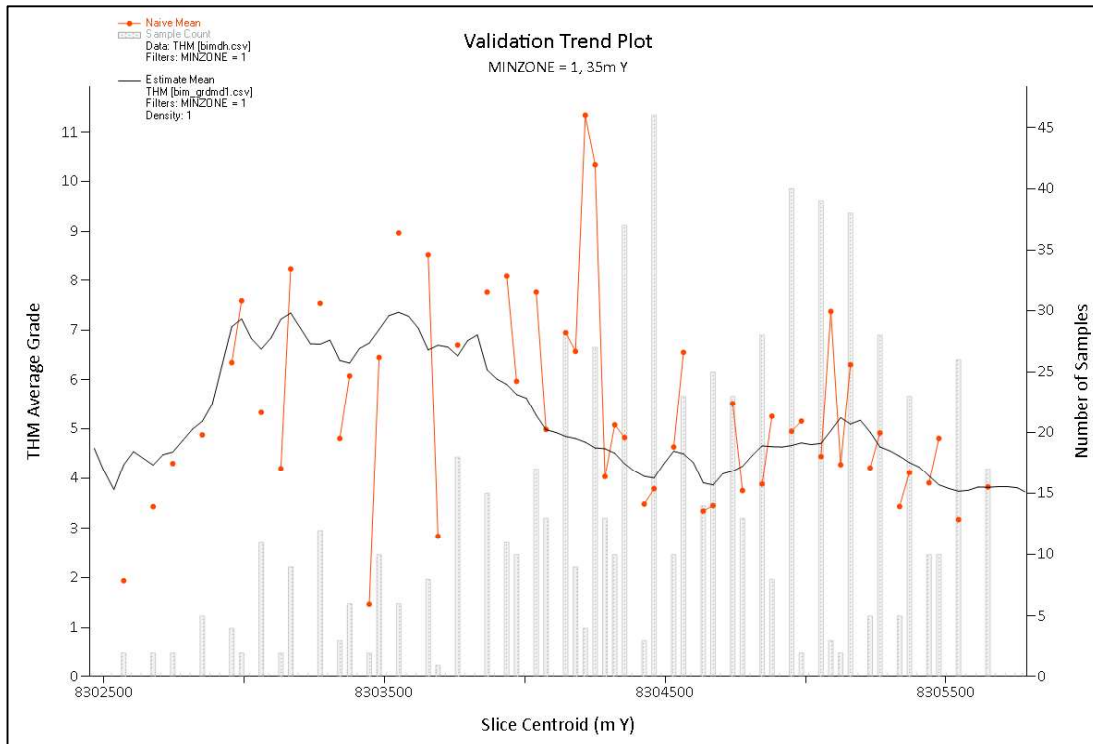
An example of swath plots created for Bimbi Main Zone, for the [low slimes+high THM], (referred to as MINZONE 1) are presented in Figure 11.7, Figure 11.8, and Figure 11.9.

Figure 11.7 Bimbi Main swath plot (Eastings) MINZONE 1 (low slimes and high (>1%) THM)



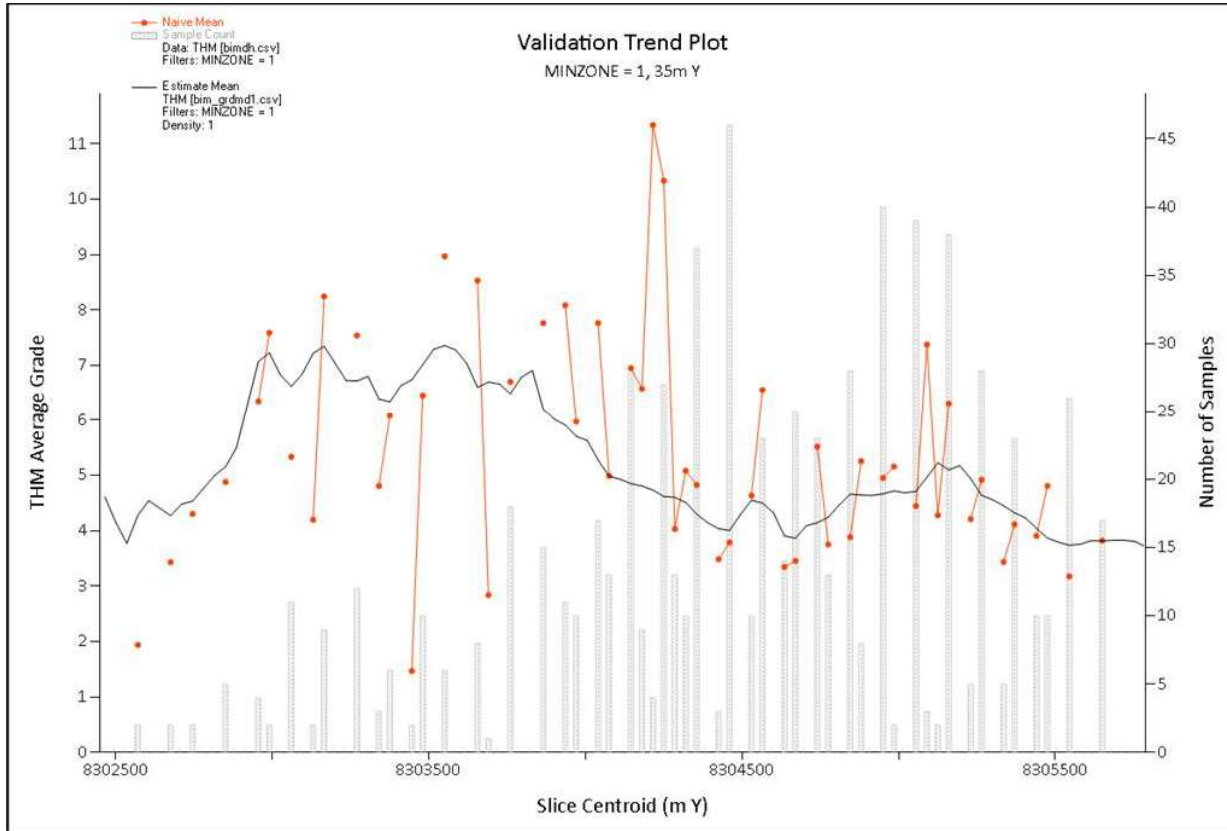
Source: AMC, 2022.

Figure 11.8 Bimbi Main swath plot (Northings) MINZONE 1 (low slimes and high (>1%) THM)



Source: AMC, 2022.

Figure 11.9 Bimbi Main swath plot (Eastings) MINZONE 2 (high slimes and low (<1%) THM)



Source: AMC, 2022.

### 11.11 Classification

JORC Code definitions for an Inferred, an Indicated, and a Measured Mineral Resource are as follows:

*"An 'Inferred Mineral Resource' is that part of a Mineral Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes which may be limited or of uncertain quality and reliability.*

*An 'Indicated Mineral Resource' is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed.*

*A 'Measured Mineral Resource' is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and grade continuity."*

In general, the Chilwa HMS deposits have sufficient data and good understanding of the underlying geology and mineralization to have significant amounts of Indicated material.

However, classification is the expression of confidence in the estimate that should also take the following information into account:

- Drilling data type and quality.
- Confidence in the geological model.
- Confidence in the sampling and assaying.
- Confidence in the volumetrics and density data.
- Quality and robustness of the MRE.

There have been significant issues with data quality as a result of fundamental failures in the primary assay laboratory. All samples that were identified as having been impacted by the faulty processing procedures have been re-analysed, however it remains unclear if any other samples were impacted and have not been identified.

Given the presence of recoveries lower than 70% as well as recoveries greater than 100%, it is the Competent Person's opinion that the drilling data only provides sufficient support for an Inferred classification.

The geological models are somewhat simplistic but based on the resolution of the drilling data they do define the mineralization domains to an acceptable degree for an Indicated classification.

The density data is restricted and widely spaced but provides sufficient information to infer the average density per deposit at an Inferred level of confidence.

The resource estimates are based on the common industry estimation method of inverse distance weighted to a power of two. The use of an anisotropic search ellipse and dynamic anisotropy to correctly orientate the search is appropriate and robust in the Competent Persons opinion. The model validations all indicate a good correlation between the estimated grade in the models and the informing drilling data and as such the estimates support an Inferred and Indicated classification.

While the general level of confidence is toward Indicated, the fundamental issue with the assays means it is not possible to classify any of the resource above Inferred based on the current sample data available.

It is CML's stated objective to redrill, assay, model and estimate the known mineral deposits as well as exploration targets locate within the Project.

## **11.12 Pit optimizations of the Chilwa block models**

### **11.12.1 Summary**

To support the economic potential and classification of the models, a preliminary pit optimization study was undertaken. The block models for the deposits were developed by AMC in July 2022 while the existing topographic surface and all input economic parameters for the pit optimization process were provided by AMC.

Basic pit optimization produces the following information about each block in the block models:

- It determines whether the block is inside or outside the optimal (ultimate) pit.
- It determines whether the block should be processed as ore (and if so, by what processing method if several methods could be used) or sent to the waste dump.

The main objective of the study was to define the potential of the mineralization to be ultimately classified and mined, and if the Project could potentially be profitable.

AMC has not estimated Ore Reserves for the deposit. The optimization study was for the sole purpose of providing information to CML about the mining potential of the deposit and to support its potential for eventual economic extraction. This pit optimization study is conceptual in nature and does not represent any kind of Ore Reserve estimate.

Five block models generated by AMC were used for pit optimization. The blocks models contained fields for HM, slimes (clay), and coarse material.

Values for density, and grades for zircon and ilmenite minerals were provided (Table 11.8). The value of the project is dependent on the grades of the HM assemblage.

**Table 11.8** Values for density, and grades for zircon and ilmenite minerals

Location	Abbreviation	Density (t/m <sup>3</sup> )	Zircon (% of HM)	Ilmenite (% of HM)
North Chilwa (Halala and Namanja)	NCW	1.490	5.0	70
Mposa	MPO	1.653	9.7	75
Northeast Bimbi	NEB	1.700	5.1	82
Bimbi	BIM	1.699	5.1	82
Mpyupyu	MPY	1.726	3.3	80
	(MPY_FLAT)	1.726	5.2	82

Dry mining methods have been considered in this optimization whereas if there is sufficient valuable mineral below the ground water level a dredge (wet) mining method would be considered.

The slimes levels are high. Normally AMC would apply penalties (a cost) for additional flocculants and handling. However, given the assaying issues identified in 2015, the grades in the block models cannot be trusted as appropriate. Average slimes grades greater than 10% may require an additional processing circuit for thickening and flocculants. When slimes grades are very high (above 20%) the rehabilitation, mining and tailing operation will be negatively impacted by the proportion of slime.

### 11.12.2 Input parameters

The pit optimization study was based on the following information, generated by AMC:

- Block models with Inferred classification (generated by AMC).
- Topographic surface (provided by MEIML).
- Input economic parameters (provided by AMC).

The inputs used to define the pit shells, are from a proprietary AMC database of costs, derived from recent costs and recoveries for mineral sands operations in Africa. The mineral prices have been supplied by CML and are comparable to prices used on other recent HMS projects in the AMC database.

The parameters used for the optimization studies are presented in Table 11.9.

Table 11.9 Pit optimization input parameters

Physicals	
Soil thickness	0.4 m
Operating costs	
Dry Units	
Surface related costs	
Topsoil	2.0 \$/bcm
Clearing and rehabilitation	20,000 \$/ha
Mining costs	
Truck and excavator	1.5 \$/t
Processing on site	
Wet Concentrator	1.0 \$/t ore
Administration/other	1.0 \$/t ore
Off site	
Transport	60 \$/t HMC
Mineral Separation	20 \$/t HMC
Royalty	3% of revenue
Recoveries	
HMC from WCP	
HM recovery	90%
HM grade of HMC	92.5%
Overall recovery of	
Ilmenite	80%
Zircon	57%
Mineral prices	
Ilmenite	275 \$/t in product
Zircon	1,850 \$/t in product

Note: \$ = US\$.

### 11.12.3 Pit optimization results

AMC used Whittle Four-X™ optimization software (an implementation of the Lerchs-Grossmann open-pit optimization algorithm) to generate a series of nested optimal pit shells for each deposit. Each pit shell represents the shape (if mined) that will produce the best cashflow at different mineral prices.

The inputs used to define the pit shells, are from a proprietary AMC database of costs, derived from recent costs and recoveries for mineral sands operations in Africa. The mineral prices have been supplied by CML and are comparable to prices used on other recent HMS projects in the AMC database.

The areas below or equal to Revenue Adjustment Factor (RF) 1 (red) are worth mining with the given revenue and cost inputs. If the mineral prices were to double, or a combination of changes were to occur (prices, recoveries, costs grades) that would equate to doubling the mineral price received, then the optimal pit shell would extend to the RF=2 pit shell limits (orange).

Figure 11.10 to Figure 11.14 show the optimized pit shells at RF=1 and RF=2 for the deposits.



Figure 11.10 North Chilwa (Namanja and Halala) deposits, plan view

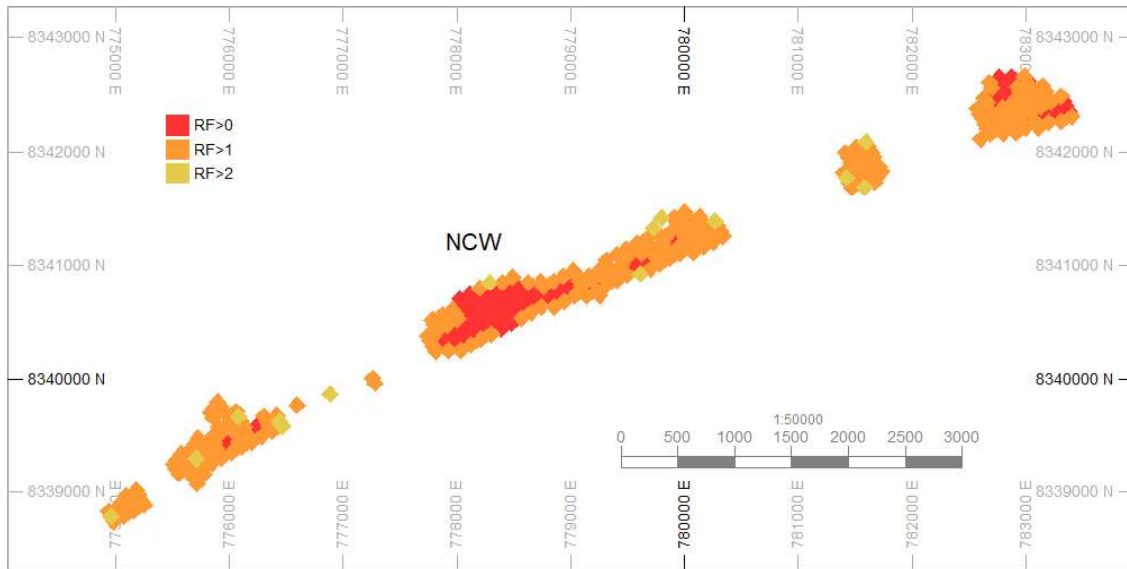


Figure 11.11 Mposa deposit, plan view

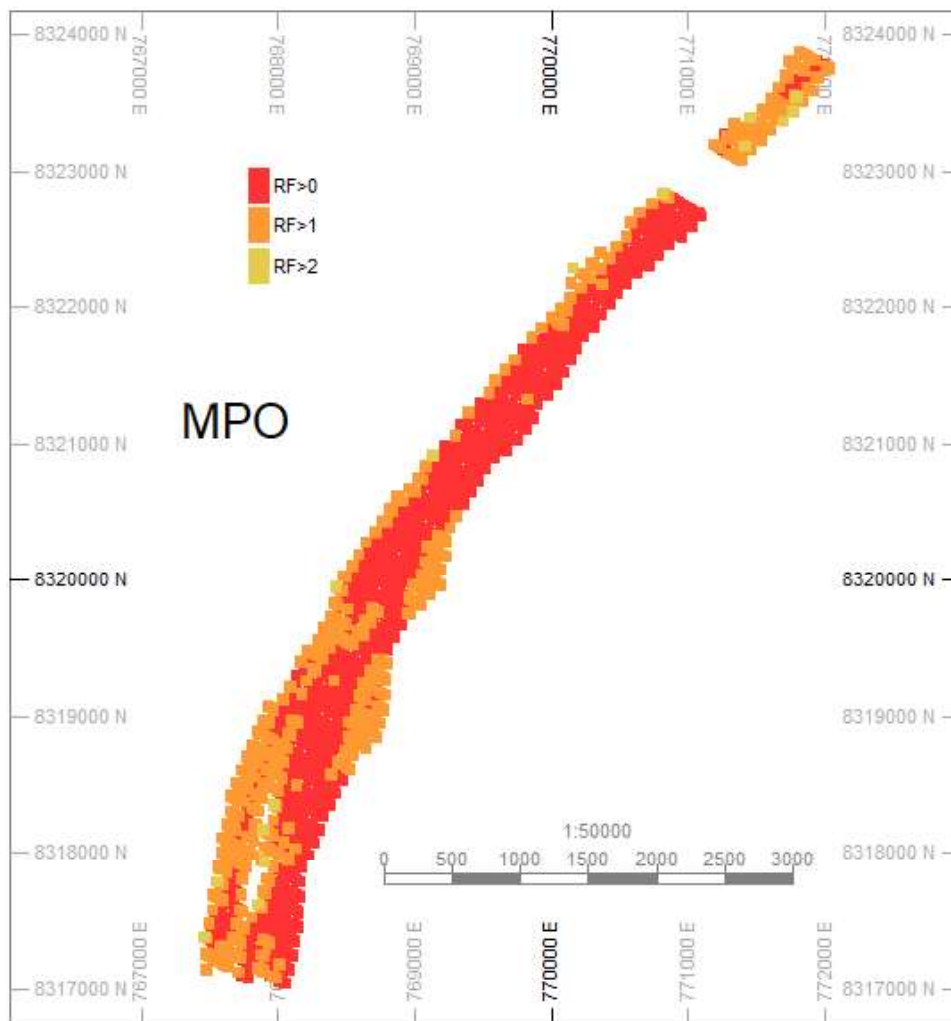




Figure 11.12 North East Bimbi deposit, plan view

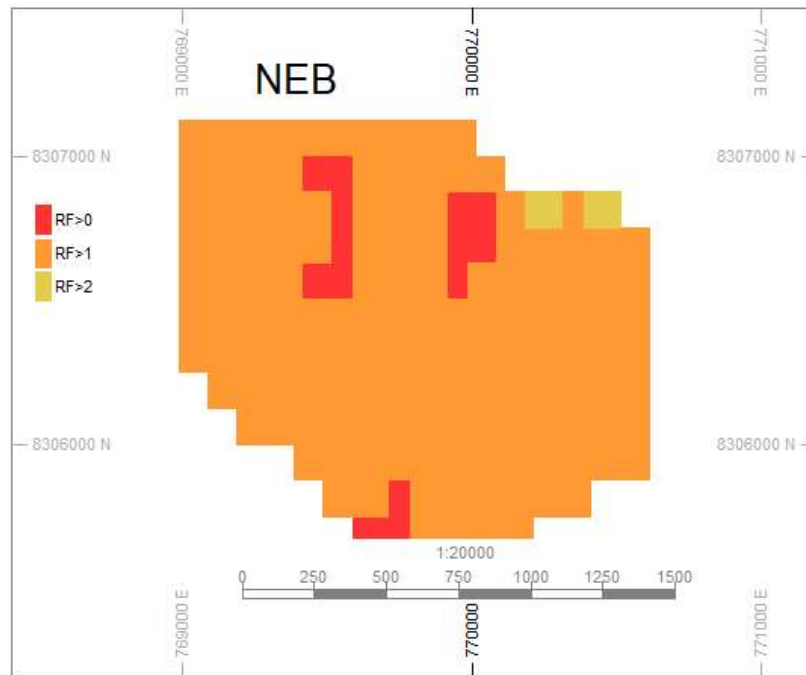


Figure 11.13 Bimbi deposit, plan view

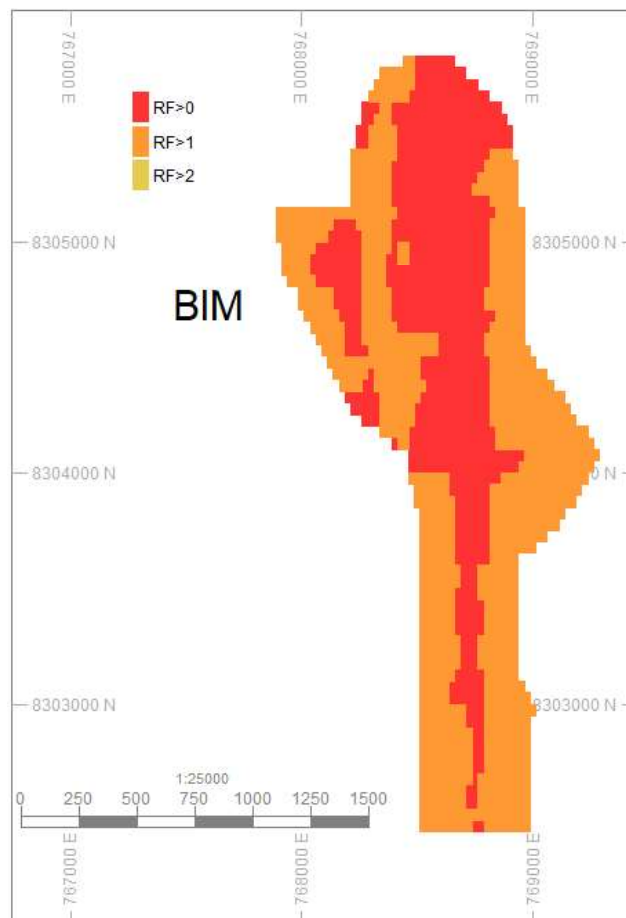


Figure 11.14 Mpyupyu deposit, plan view

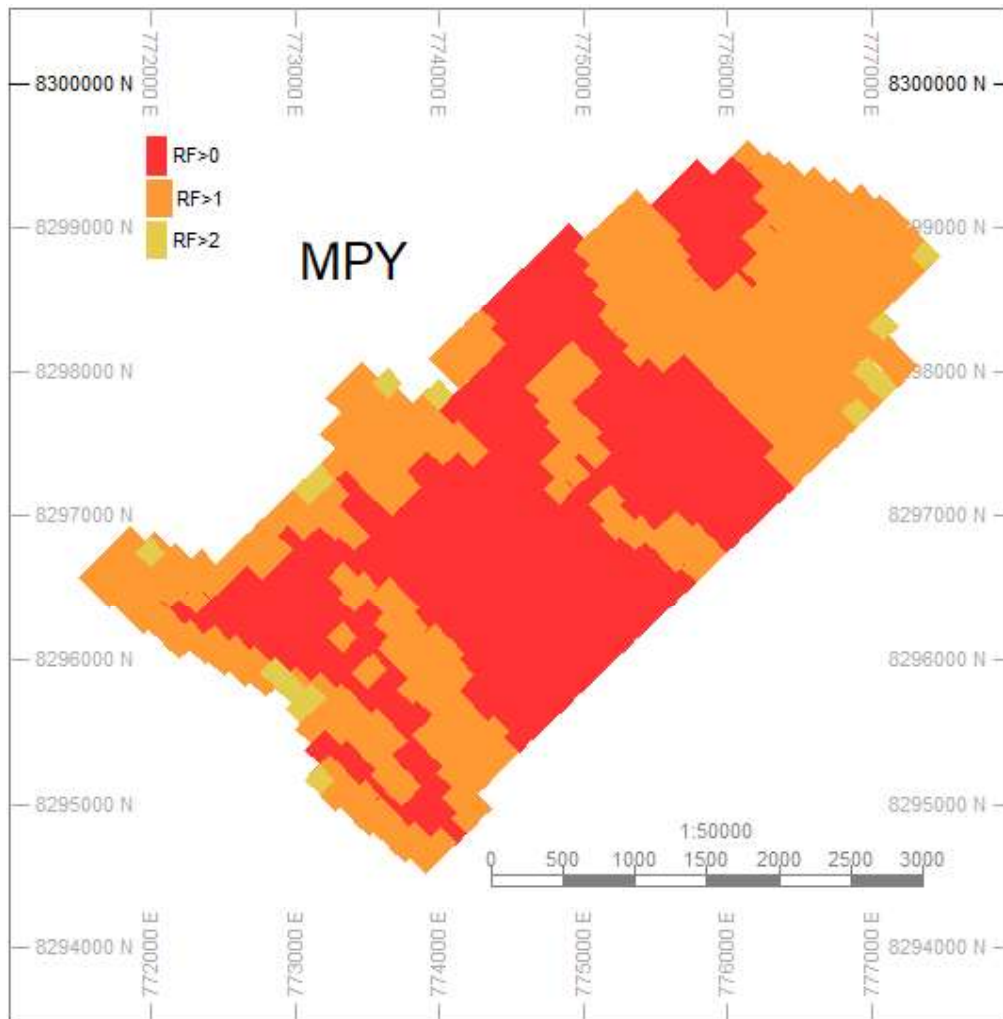


Table 11.10 summarizes the RF 1 pit shells for the Project.

Table 11.10 Optimization results (RF=1)

Block model	MPY	BIM	NEB	MPO	NCW	Total
Pit Shell No	30	30	7	37	21	
Revenue Factor (%)	100%	100%	100%	100%	100%	
Total Tonnes (kt)	46,538	5,942	537	17,344	4,278	<b>74,639</b>
Total Volume (k.BCM)	26,963	3,498	316	10,493	2,871	<b>44,140</b>
Surface Area (ha)	749	104	17	240	55	<b>1,165</b>
Waste Tonnes (kt)	676	65	0	255	38	<b>1,033</b>
Ore Tonnes (kt)	45,862	5,878	537	17,090	4,240	<b>73,606</b>
Slime Grade (%)	26%	23%	18%	14%	8%	<b>22%</b>
Coarse Grade (%)	7%	17%	3%	17%	2%	<b>10%</b>
HM Grade (%)	5%	5%	4%	5%	5%	<b>5%</b>
Ilmenite Grade (% of HM)	82%	82%	82%	75%	70%	<b>79%</b>
Zircon Grade (% of HM)	5%	5%	5%	10%	5%	<b>6%</b>
HMC Tonnes (kt)	2,138	284	20	805	212	<b>3,460</b>
Ilmenite Product (kt)	1,433	192	14	497	122	<b>2,257</b>
Zircon Product (kt)	59	8	1	46	6	<b>120</b>
Revenue (\$m)	504	68	5	221	45	<b>843</b>
Surface-related costs (\$m)	21	3	0	7	2	<b>33</b>
Mining (\$m)	70	9	1	26	6	<b>112</b>
On-site processing related costs (\$m)	46	6	1	17	4	<b>74</b>
Transport (\$m)	128	17	1	48	13	<b>208</b>
Mineral Separation costs (\$m)	44	6	0	17	4	<b>71</b>
Royalty (\$m)	15	2	0	7	1	<b>25</b>
Other (\$m)	92	12	1	34	8	<b>147</b>
Total (\$m)	416	54	5	156	39	<b>669</b>
Operating Surplus (\$m)	88	14	0	66	6	<b>174</b>
MGV (\$m)	316	43	3	150	27	<b>539</b>

Note: \$ = US\$.

The operating surplus is the revenue less the operating costs and does not include initial capital. The RF=1 pit shell produces the highest possible value of operating surplus.

The mine gate value (MGV) is the net return at the mine gate (revenue less the costs incurred outside the mine gate).

Table 11.11 summarizes the RF=2 pit shells for the deposits. The pit shells were generated at twice the mineral prices and evaluated at the mineral prices. The operating surplus would be positive if the shells were evaluated at twice the mineral prices. The RF=2 pit shell has been included to show an indicative best-case scenario.

Table 11.11 Optimization results (RF=2)

Block model	MPY	BIM	NEB	MPO	NCW	Total
Pit Shell No	70	57	47	77	61	
Revenue Factor (%)	200%	190%	200%	200%	200%	
Total Tonnes (kt)	166,929	65,934	42,473	31,189	16,082	<b>322,608</b>
Total Volume (kBCM)	96,714	38,808	24,984	18,868	10,794	<b>190,168</b>
Surface Area (ha)	1,249	219	196	352	165	<b>2,180</b>
Waste Tonnes (kt)	40,072	12,269	28,335	5,142	4,408	<b>90,225</b>
Ore Tonnes (kt)	126,857	53,666	14,138	26,047	11,675	<b>232,383</b>
Slime Grade (%)	34%	41%	24%	18%	14%	<b>32%</b>
Coarse Grade (%)	6%	11%	7%	17%	4%	<b>9%</b>
HM Grade (%)	3%	3%	3%	4%	4%	<b>3%</b>
Ilmenite Grade (% of HM)	82%	82%	82%	75%	70%	<b>80%</b>
Zircon Grade (% of HM)	5%	5%	5%	10%	5%	<b>5%</b>
HMC Tonnes (kt)	4,216	1,429	357	998	449	<b>7,449</b>
Ilmenite Product (kt)	2,825	964	241	615	259	<b>4,903</b>
Zircon Product (kt)	117	43	11	57	13	<b>240</b>
Revenue (\$m)	993	344	86	274	95	<b>1,793</b>
Costs Surface (\$m)	35	6	5	10	5	<b>61</b>
Mining (\$m)	250	99	64	47	24	<b>484</b>
Wet Concentrator Plant (\$m)	127	54	14	26	12	<b>232</b>
Transport (\$m)	253	86	21	60	27	<b>447</b>
Mineral Separation Plant (\$m)	87	29	7	21	9	<b>153</b>
Royalty (\$m)	30	10	3	8	3	<b>54</b>
Other (\$m)	254	107	28	52	23	<b>465</b>
Total (\$m)	1,035	391	143	223	103	<b>1,896</b>
Operating Surplus (\$m)	-42	-47	-57	51	-7	<b>-103</b>
MGV (\$m)	624	219	55	185	56	<b>1,139</b>

Note: \$ = US\$.

### 11.13 Reasonable prospects hurdle

Clause 20 of the JORC Code requires that all reports of Mineral Resources must have reasonable prospects for eventual economic extraction (RPEEE), regardless of the classification assigned to the Mineral Resource.

The Competent Person (Mark Burnett) deems there are RPEEE on the following basis:

- The processing methods were tested, beneficiation parameters and regression formulas for the main elements established, and flowsheets suggested. The metallurgical testwork gives reasonable confidence that recoveries are possible using spiral concentration processing methods.
- The cut-off grade adopted for reporting (1.0 to 3.0% THM) is considered reasonable, given the Mineral Resource is likely to be exploited by open-cut mining methods.
- Preliminary open-pit optimization tests and conceptual economic analysis (Section 11.12) confirmed that the project could have a positive operating surplus.
- The deposit is amenable to relatively simple open cut development.
- The Project area is reasonably serviced by infrastructure.
- The tenure of the ELs is in good standing.

## 11.14 Resource tabulation

The MREs are reported in Table 11.12 to Table 11.14, reported for the THM cut-offs of 1.0%, 1.5%, and 1.5%. The reported Mineral Resources are constrained by the ultimate undiscounted pit shells with a RF=1.0. The MREs have been reported in accordance with the JORC Code and are therefore suitable for public reporting. The effective date of the MREs is 31 July 2022. All the estimates were classified as Inferred.

Table 11.12 Chilwa Heavy Mineral Sands Project – Inferred Mineral Resources at 1.0% THM as at 31 July 2022

Deposit	Volume (million m <sup>3</sup> )	Tonnes (million t)	Dry Density (t/m <sup>3</sup> )	Gangue (%)	Ilmenite (%)	Slimes (%)	THM (%)	Zircon (%)
Bimbi	1.5	2.6	1.7	0.7	4.3	15.3	5.3	0.3
Northeast Bimbi	3.6	6.1	1.7	0.3	2.2	15.9	2.7	0.1
Mposa (Main)	11.7	19.4	1.7	0.7	3.2	11.7	4.3	0.4
Mposa (North)	0.6	1.0	1.7	0.3	1.4	8.3	1.9	0.2
Mpyupyu (dune)	2.0	3.5	1.7	1.2	5.7	15.3	7.1	0.2
Mpyupyu (flat)	9.5	16.4	1.7	0.5	2.9	15.4	3.6	0.2
Nkotamo	0.1	0.2	1.5	1.1	3.0	28.3	4.2	0.2
Halala	6.0	8.9	1.5	0.9	2.6	9.8	3.7	0.2
Beacon	0.4	0.6	1.5	0.6	1.8	17.7	2.5	0.1
Namanja West	2.0	2.9	1.5	0.8	2.3	14.7	3.3	0.2
<b>Total</b>	<b>37.5</b>	<b>61.6</b>	<b>1.6</b>	<b>0.7</b>	<b>3.0</b>	<b>13.3</b>	<b>3.9</b>	<b>0.3</b>

- Estimates of the Mineral Resource were prepared by AMC Consultants (UK) Limited (AMC).
- In situ, dry metric tonnes have been reported using varying densities and slime cut-off per deposit.
- Material below 30% slimes for Halala, 20% slimes for Bimbi, Northeast Bimbi and Mpyupyu (dune and flat) and 25% slimes for Mposa (Main and North). All other deposits are a stated using 30% slimes cut-off.
- Tonnages and grades have been rounded to reflect the relative uncertainty of the estimates and resultant confidence levels used to classify the estimates. As such, columns may not total.
- Estimates of the Mineral Resource have been constrained by ultimate pit shells to demonstrate RPEEE.
- Estimates are classified as Inferred according to JORC Code.

Table 11.13 Chilwa Heavy Mineral Sands Project – Inferred Mineral Resources at 1.5% THM as at 31 July 2022

Deposit	Volume (million m <sup>3</sup> )	Tonnes (million t)	Dry Density (t/m <sup>3</sup> )	Gangue (%)	Ilmenite (%)	Slimes (%)	THM (%)	Zircon (%)
Bimbi	1.5	2.6	1.7	0.7	4.3	15.3	5.3	0.3
Northeast Bimbi	3.5	6.0	1.7	0.4	2.2	15.9	2.7	0.1
Mposa (Main)	11.2	18.5	1.7	0.7	3.3	11.5	4.4	0.4
Mposa (North)	0.4	0.6	1.7	0.4	1.8	8.7	2.3	0.2
Mpyupyu (dune)	2.0	3.5	1.7	1.2	5.7	15.3	7.1	0.2
Mpyupyu (flat)	9.0	15.6	1.7	0.5	3.0	15.3	3.7	0.2
Nkotamo	0.1	0.2	1.5	1.1	3.0	28.3	4.2	0.2
Halala	5.9	8.7	1.5	0.9	2.6	9.7	3.7	0.2
Beacon	0.4	0.6	1.5	0.6	1.8	17.7	2.6	0.1
Namanja West	2.0	2.9	1.5	0.8	2.3	14.6	3.3	0.2
<b>Total</b>	<b>36.0</b>	<b>59.2</b>	<b>1.6</b>	<b>0.7</b>	<b>3.1</b>	<b>13.2</b>	<b>4.1</b>	<b>0.3</b>

- Estimates of the Mineral Resource were prepared by AMC Consultants (UK) Limited (AMC).
- In situ, dry metric tonnes have been reported using varying densities and slime cut-off per deposit.
- Material below 30% slimes for Halala, 20% slimes for Bimbi, Northeast Bimbi and Mpyupyu (dune and flat) and 25% slimes for Mposa (Main and North). All other deposits are a stated using 30% slimes cut-off.
- Tonnages and grades have been rounded to reflect the relative uncertainty of the estimates and resultant confidence levels used to classify the estimates. As such, columns may not total.
- Estimates of the Mineral Resource have been constrained by ultimate pit shells to demonstrate RPEEE.
- Estimates are classified as Inferred according to JORC Code.

Table 11.14 Chilwa Heavy Mineral Sands Project – Inferred Mineral Resources at 3.0% THM as at 31 July 2022

Deposit	Volume (million m <sup>3</sup> )	Tonnes (million t)	Dry Density (t/m <sup>3</sup> )	Gangue (%)	Ilmenite (%)	Slimes (%)	THM (%)	Zircon (%)
Bimbi	1.3	2.2	1.7	0.7	4.8	15.0	5.8	0.3
Northeast Bimbi	0.9	1.6	1.7	0.4	2.8	16.0	3.4	0.2
Mposa (Main)	6.9	11.4	1.7	0.9	4.3	10.2	5.7	0.6
Mposa (North)	0.1	0.1	1.7	0.6	2.8	9.9	3.8	0.4
Mpyupyu (dune)	1.9	3.2	1.7	1.3	6.0	15.1	7.5	0.2
Mpyupyu (flat)	5.6	9.7	1.7	0.6	3.8	16.0	4.6	0.2
Nkotamo	0.1	0.1	1.5	1.1	3.2	28.1	4.5	0.2
Halala	3.5	5.3	1.5	1.2	3.3	7.3	4.6	0.2
Beacon	0.1	0.1	1.5	0.9	2.4	15.5	3.5	0.2
Namanja West	1.1	1.7	1.5	1.0	2.7	13.1	3.9	0.2
<b>Total</b>	<b>21.5</b>	<b>35.5</b>	<b>1.6</b>	<b>0.9</b>	<b>4.0</b>	<b>12.4</b>	<b>5.2</b>	<b>0.3</b>

- Estimates of the Mineral Resource were prepared by AMC Consultants (UK) Limited (AMC).
- In situ, dry metric tonnes have been reported using varying densities and slime cut-off per deposit.
- Material below 30% slimes for Halala, 20% slimes for Bimbi, Northeast Bimbi and Mpyupyu (dune and flat) and 25% slimes for Mposa (Main and North). All other deposits are a stated using 30% slimes cut-off.
- Tonnages and grades have been rounded to reflect the relative uncertainty of the estimates and resultant confidence levels used to classify the estimates. As such, columns may not total.
- Estimates of the Mineral Resource have been constrained by ultimate pit shells to demonstrate RPEEE.
- Estimates are classified as Inferred according to JORC Code.

### 11.15 Comparison with previous estimates

AMC is not aware of any previous, publicly disclosed, MREs for the Project.

## 12 Exploration strategy and proposed work plan

A total of A\$4.5 million, over a two-year period, has been budgeted by CML for:

- Salaries for exploration staff.
- Physical exploration activities.
- Geological, hydrological, and geo-hydrological studies.
- MREs.
- Technical studies and feasibility studies.
- Rehabilitation work.
- Maintenance and renewal of the ELs.
- Indirect costs such as the cost of land access and administration.
- Other activities or arrangements as required.

The detail of the planned expenditure, as provided by CML, is presented in Table 12.1.

Table 12.1 Planned exploration budget

Activity	Year 1 (A\$)	Year 2 (A\$)	Total (A\$)
Assays and Metallurgical	710,940	683,060	1,394,000
Bulk Sampling	50,000	50,000	100,000
Drilling	804,000	804,000	1,608,000
ESG	333,000	60,000	393,000
Geological Staff and Field Technicians	274,000	285,412	559,412
Infrastructure/Road Cutting	110,000	50,000	160,000
Radio Metrics	95,000	-	95,000
Resource Model and CP	190,588	-	190,588
<b>Total (A\$)</b>	<b>2,567,528</b>	<b>1,932,472</b>	<b>4,500,000</b>

AMC considers the exploration budget to be reasonable when compared to similar HMS exploration projects. Given the potential for further exploration success on the ELs, AMC is of the opinion that the exploration programme, exploration methodology, and exploration timeline follow normal industry standards.

AMC notes that exploration is to be focused on the Lake Chilwa EL and no prospecting, exploration, or mining activities are planned, at this stage, for the Chilwa Island EL.

## 13 Conclusions and recommendations

The MREs and classification as reported in this IGR are based on historical drilling and assay results. AMC is of the opinion that, given the issues identified with SGS assay results, the variable nature of the recoveries experience in the AC drilling, the geological models as interpreted from drilling had to be revised and simplified during the Mineral Resource estimation process, that a classification at the Inferred level of confidence should be given.

To increase the confidence in the Mineral Resource classification level as well as to validate the results and exploration potential for HMS on the ELs, CML will be embarking on a new exploration and drilling programme.

AMC has reviewed the planned drilling and exploration programme as well as having discussed the proposed programme with relevant CML staff. AMC is of the opinion that the planned exploration programme, budget, and aims are fit for purpose and follow normal industry standards.

### 13.1 Conclusions

#### Geology

- The deposit geology is well understood. Further exploration work is planned to be undertaken by CML, as detailed in this IGR. This work will include the redrilling, assaying, modelling and classifying of the both the deposits as well as the HMS anomalies that have been identified as occurring within the EL.
- AMC considers the geological risks associated with the Project to be low.

#### Drilling methods

- Given the variable recoveries encountered by previous owners, CML has elected to redrill the identified deposits as well as the THM anomalies using sonic core drilling.
- AMC is of the opinion that the use of sonic drilling is appropriate for deposits of this nature, and it will allow CML to accurately determine THM variability within the deposits as well as to accurately determine the elevation and variability associated with the clay footwall.
- The risk to the Project is medium.

#### Sampling techniques and data

- The sample recovered experienced for both DD and AC were variable. Given the sample size as well as difficulty in determining the location of the DD sample in core runs, these data were not used in any geological modelling or MREs.
- AMC is of the opinion that the plan to use sonic drilling for further exploration and estimation work is appropriate as this will allow representative samples to be taken.
- The risk to the Project is low to medium.

#### QA/QC

- The independent QA/QC programme by MEIML successfully detected the analytical failure at SGS, however this has resulted in the reliability of the SGS data, including the re-assayed values, being questioned.
- AMC is of the opinion that the current assay data should only be used to assist CML in targeting their drilling programme.
- The risk to the Project is medium.



## Block modelling and grade estimation

- AMC has estimated the HMS deposits identified to date on the EL using Inverse Distance Weighted to the power of 2, methodology with dynamic anisotropy.
- AMC is of the opinion that the methodology employed and the estimates for the deposits are acceptable for this level of study.
- Given the uncertainties related to AC recoveries, assay results and the simplified geological interpretation, AMC is of the opinion that classifying the MREs at an Inferred level of confidence is appropriate for the Project at this level of study.

## Density

- Specific gravity measurements were undertaken using the sand replacement method. AMC has reviewed the methodology used and are of the opinion that the methodology described followed industry accepted standards.
- AMC is of the opinion that the risk of a difference in tonnage is moderate to low.

## Metallurgical testwork results

- Initial processing and metallurgical testwork yielded encouraging recoveries.
- AMC understands that the recovery process was not optimized for zircon and garnet was regarded as a trash mineral.
- In AMC's opinion, additional testwork and refining of the recovery process has the potential to increase the economic potential of the Project.
- As noted in the initial processing and testwork results, the HMS deposits present within the EL all have differing processing characteristics and that the processing of multiple streams in a single plant should be avoided.

## Licensing and permits

- Two exploration licences were issued to MEIML, EL 0771/22 (Chilwa Island) and EL 0670/22 (Lake Chilwa) and on the 26 and 27 September 2022 respectively.
- The ELs are valid for a period of three years and allow for the exploration of HMS deposits on the granted ELs.
- The term of exploration may be extended following the provisions of Section 119 of the Malawian Mines and Minerals Act.

As far as AMC is aware, the licences are in good standing. AMC has relied on a legal opinion from MEIML's lawyers that is included in this Prospectus.

## 13.2 Recommendations

- Create a DTM if the extended licence area, identifying with the main aim to determine the 631 mamsl and 623 mamsl elevations.
- Undertake radiometric and ground magnetic surveys over the extended EL.
- Redrill and sample the current deposits using sonic drilling, re-assay, remodel and re-estimate their THM, slimes and oversize contents.
- Drill the exploration targets, using sonic drilling techniques, to confirm if they can be upgraded to Mineral Resources.
- Determine the location of the clay footwall and how undulating it is.
- Assay for garnet, apatite and REE potential.
- Commence with a bulk sampling programme on the resources to validate the earlier metallurgical and processing testwork results.
- Once drilling, assaying and process testwork has been completed, update the scoping study using the revised HMS block grade estimates as well as current consensus price forecasting.

## 14 References

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# Appendix A

## JORC Code Table 1

# JORC Code, 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

JORC Code explanation		Commentary
<p><b>Criteria</b></p>		
<p><b>Sampling techniques</b></p>	<p><i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i></p>	<ul style="list-style-type: none"> <li>• Prior to commencement of drilling, logging, and sampling, the geological team developed a standardized set of protocols and procedures.</li> <li>• Whole samples were collected every 1 m in a plastic sample-bag from the air core (AC) rig's cyclone. This included wet samples. No specialist tools were used, or additional measurements taken other than the sample.</li> <li>• As received samples (no free water) were weighed at the rig using a spring balance to ensure that the weight was adequate. Due to recovery issues 52% of the samples had poor recovery (&lt;70%). The spring balance was not calibrated and deviation between balances used at the various rigs were noted. All samples were re-weighed in the core yard to confirm sample mass.</li> <li>• Samples were geologically logged at the rig. Panning of a grab sample from the sample bag was used to conduct a visual determination for coarse, HM, and slimes at the rig.</li> <li>• Samples were dried in drying pans, in the sun, at the core yard where they were re-weighed, manually de-aggregated, and a 1 kg sub-sample was split using multiple passes using a 50-50 riffle splitter.</li> <li>• Samples were dispatched in batches to the primary assay lab (SGS) for analysis.</li> <li>• The Competent Person believes that the sampling techniques were industry standard and acceptable for the Mineral Resource Estimate.</li> </ul>
<p><b>Drilling techniques</b></p>	<p><i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></p>	<ul style="list-style-type: none"> <li>• Primary sampling for resource delineation was accomplished using industry-standard drilling (Wallis air coring). Whole samples were collected every 1 m in a plastic sample-bag from the rig's cyclone. This included wet samples.</li> <li>• Triple-tube diamond drilling (DD) was also undertaken but due to very poor recovery as well as a sample support issue between the AC and DD, the DD information was not used for Mineral Resource estimation.</li> </ul>
<p><b>Drill sample recovery</b></p>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	<ul style="list-style-type: none"> <li>• Samples (no free water) were weighed at the rig as a measure of recovery.</li> <li>• Due to technical difficulties with the scales (spring balances) there were significant errors in the recorded masses.</li> <li>• No redrilling was undertaken on samples with low recovery.</li> <li>• There is a weak correlation between slimes content and recovery.</li> <li>• No clear correlation is observed between recovery and total heavy mineral (THM).</li> <li>• There is a weak negative bias in the oversize values with respect to recovery.</li> </ul>
<p><b>Logging</b></p>	<p><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<ul style="list-style-type: none"> <li>• Each 1 m sample interval was logged in the field by a Geologist.</li> <li>• Items recorded were dominant sediment type, colour, hardness, coarseness, sorting, and roundness.</li> <li>• A grab sample from each interval was wet panned, and a visual estimation of THM, slimes, and oversize was recorded.</li> <li>• All intervals were logged according to the established protocol.</li> <li>• 5% of all logging was checked against the AC samples by the Senior Project Geologist to ensure consistency in the geological description.</li> </ul>

JORC Code explanation		Commentary
<p><b>Criteria</b></p>	<p><b>Sub-sampling techniques and sample preparation</b></p> <p><i>If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p> <p><i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<ul style="list-style-type: none"> <li>At the core yard, the entire sample was placed in a drying pan and sundried.</li> <li>The dried samples were often cemented due to a high clay-content and were manually disaggregated using a mortar and pestle, comprising of a steel bin and a RC blasthole bit welded to a steel pipe.</li> <li>The disaggregated samples were weighed, and riffle-split multiple times using a 50-50 riffle splitter, to generate an approximate 1 kg representative sub-sample for submission to SGS.</li> <li>Sample representivity was monitored through the generation of field duplicates derived from the final split of randomly selected samples for every batch of 20 samples</li> <li>Blanks, a site constructed reference sample, and umpire samples (5% replication) were also inserted per batch to monitor the data quality.</li> <li>These quality assurance and quality control samples (QA/QC) samples identified that some of the assay results from SGS were biased.</li> <li>The sample size is considered representative in that the 1 kg sample represents roughly 10% of the parent sample and was generated using appropriate riffle splitting techniques.</li> </ul>
<p><b>Quality of assay data and laboratory tests</b></p>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></p> <p><i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></p>	<ul style="list-style-type: none"> <li>The analysis of the samples for THM, slimes, and oversize was conducted using industry standard techniques for HMS samples. The screen size for the slimes determination was adjusted from the default of 65 &lt; m to 54 &lt; m based on mineralogical characterization work conducted by AML. This adjustment is considered to be valid by the Competent Person.</li> <li>For every batch of 20 samples, a blank (silica pool sand), a standard (generated on-site from a 1-tonne bulk sample) and a duplicate were randomly inserted.</li> <li>5% of all samples were duplicated and sent to an umpire laboratory for check analysis</li> <li>The blank sample proved to have very minor heavy minerals that registered in the heavy liquid separation but were effective at monitoring contamination between samples.</li> <li>The duplicates and the standards as well as the umpire samples identified an analytical error in the analysis of some of the sample batches from Halala, Bimbi, and Mposa (approximately 60% of the samples).</li> <li>The compromised samples were re-assayed by SGS; however, AMC has elected to keep the classification of the Mineral Resource at the Inferred level of confidence.</li> <li>The Competent Person believes that the QA/QC methods applied were industry standard and acceptable for the Mineral Resource Estimate.</li> </ul>
<p><b>Verification of sampling and assaying</b></p>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<ul style="list-style-type: none"> <li>10% of the RC holes were relogged from the chip tray samples by a Senior Geologist. No significant deviations from established protocols were noted. All check log results are stored in the database.</li> <li>20% of all RC holes were twinned by triple-tube diamond holes for verification purposes but due to poor recovery and the sample support difference between the AC and DD samples, AMC elected not to use the DD information in the resource estimation process.</li> </ul>
<p><b>Location of data points</b></p>	<p><i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></p> <p><i>Specification of the grid system used. Quality and adequacy of topographic control.</i></p>	<ul style="list-style-type: none"> <li>All drilling, augering, and pitting has been surveyed by qualified surveyors, using DGPS.</li> <li>All survey work references UTM zone 36, using the WGS 84 datum</li> <li>The topography DTMs have been constructed from collar data and some limited survey lines. The resolution of the topography data is considered adequate for an Inferred Mineral Resource.</li> </ul>

**Criteria****JORC Code explanation****Commentary****Data spacing and distribution**

*Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.*

- Drilling was spaced 25 m across-strike and 100 m along-strike for most of the targets in the Chilwa project area.
- Data spacing is considered reasonable for the current level of the study.
- Compositing was not applied. All samples within the modelled horizons were left at the sample interval of 1 metre.

**Orientation of data in relation to geological structure**

*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*

- All holes were drilled vertically, which is near normal to the low-angle bedding and is therefore considered to be unbiased.

**Sample security**

*The measures taken to ensure sample security.*

- Samples were labeled, tagged, and sealed with cable ties at the drill rig.
- Samples were collected and inventoried at the drilling machines during drilling activities.
- The sample bags were then transported from the drilling site to a field storage area by field vehicle, and again inventoried on arrival.
- Samples, once transported from the drilling camp, were stored within a fenced enclosure at MEIML's processing and storage facility.
- Drilling samples were dispatched from the field storage area to MEIML's processing and storage facility. The samples were inventoried and verified on arrival.
- After processing, the laboratory samples were transported by-batch by road to the SGS laboratory in Johannesburg, while the umpire samples were airfreighted to AML in Perth.
- The sample inventory for each batch was signed off by the transport company and again by the respective laboratory.
- All hard-copy documents relating to sample transport are filed in hard copy. This includes inventory verifications at the different collection and dispatch points, export permits, and inspection certificates.

**Audits or reviews**

*The results of any audits or reviews of sampling techniques and data.*

- A review of the recovery values (as a function of the sample weight) highlighted missing sample weight data. All samples were reweighed, and the sub-sample mass added back in to arrive at a nominal dry sample mass. This revealed significant errors with the precision and accuracy of the spring balances used at the rigs. The new weights replaced the originals.



## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section)

Criteria		JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i>		<ul style="list-style-type: none"> <li>On the 26 September 2022, Mota-Engil Investments (Malawi) Limited (MEIML), a party related to Luso Global Mining B.V. (LGM), was granted Exploration Licence (EL) 0671/22 (Chilwa Island), allowing them to explore for HMS deposits over an area of 12.84 km<sup>2</sup> on Chilwa Island. The licence is valid for three years, with an option to extend the term in accordance with Section 119 of the (Malawian) Mines and Minerals Act (Act number 8 of 2019). CML has informed AMC that they have no plans to explore for or mine HMS deposits on Chilwa Island at this stage.</li> <li>On September 27 September 2022, a new licence, EL0670/22 (Lake Chilwa), was granted to MEIM, allowing them to explore for HMS deposits over an area of 865.86 km<sup>2</sup> located on the shores and hinterland around Lake Chilwa. The new licence increases MEIML's tenement holding to 865.86 km<sup>2</sup>. The licence is valid for three years, with an option to extend the term in accordance with Section 119 of the (Malawian) Mines and Minerals Act. Exploration in this EL is planned to commence in Q4 2022.</li> <li>MEIML engaged Singano Purshotam Law Consultants (Singano), a Malawian legal firm, who have their chambers in Blantyre, Malawi, to review the tenement status. AMC has had sight of the legal opinion as provided by Singano, who note that the ELs are in good standing.</li> </ul>
<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>		<ul style="list-style-type: none"> <li>Academic work was completed by Lancaster (1981) specifically looking at the Halala/Namanja Sand Bar deposit on the north shore. Dill and Ludwig (2007) studied the geomorphological-sedimentological aspects of landform types and placer deposits in the savannah and specifically Southern Malawi.</li> <li>Claus Brinkmann worked on the Mpyupyu-Kachulu deposit between 1991 and 1993 as part of an initiative by the German Government to aid mineral development in Malawi. A total of 125 pits were completed on a 500 m x 500 m grid and depth of between 2 metres and 4.2 metres deep with THM and ilmenite determinations done.</li> <li>Millennium Mining Limited concluded exploration work on the northern deposits of Halala and Namanja during the early 2000s. They completed an initial auger drill programme of 31 holes. A further 104 AC holes were drilled by Wallis Drilling on an approximate 100 m x 100 m grid.</li> <li>Millennium also completed bulk sample work through Tigor/Kumba which was supplied by three bulk samples.</li> </ul>
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>		<ul style="list-style-type: none"> <li>Lake Chilwa is a closed, saline lake, which formed as a result of tectonic activities along the East African Rift.</li> <li>The lake previously drained to the north, but the mouth eventually silted up and the lake was subsequently completely closed off. A 25 km long sand bar formed along the north shore of the lake, closing off the drainage to the north.</li> <li>The Lake Chilwa (Project) HMS targets consists of beach and dune deposits located on palaeostrandline deposits that were deposited and preserved through several cycles of lake level fluctuations and stable periods.</li> <li>The main HM deposits are located on a very distinct strandline where the conditions of sediment supply, lake level, and hydrological were favorable for the formation and preservation of the sand deposits.</li> <li>Sediment, including HMs, were eroded and supplied by several streams and rivers flowing into the lake from surrounding basement gneiss and alkaline intrusion complexes.</li> <li>The HM characteristics of each deposit are determined by the provenance rock types of rocks. Some deposits have local point sources contributing to the HM assemblage.</li> <li>The Competent Person believes that the geological model produced is of industry standard and acceptable for the Mineral Resource Estimate.</li> </ul>

JORC Code explanation		Commentary
<b>Criteria</b>	<b>JORC Code explanation</b>	
<b>Drillhole Information</b>	<p>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</p> <p>easting and northing of the drill hole collar</p> <p>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</p> <p>dip and azimuth of the hole</p> <p>down hole length and interception depth hole length.</p> <p>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</p>	<ul style="list-style-type: none"> <li>All holes were drilled vertically with the drilling trend orientated to the nominal strike/trend of the deposits, based on regional auger drilling and geological field mapping.</li> <li>Bimbi and Northeast Bimbi Deposits: 295 AC holes drilled vertically at roughly 25 m. across-strike and maximum 250 m on-strike. Minimum depth 4 m, max depth 12 m.</li> <li>Halala deposits: 327 AC holes drilled vertically at roughly 50 m across-strike and maximum 200 m on-strike. Minimum depth 2 m, max depth 24 m.</li> <li>Mposa deposits: 406 AC holes drilled vertically at roughly 50 m across-strike and maximum 200 m on-strike. Minimum depth 2 m, max depth 17 m.</li> <li>Mpyupyu deposit: 407 AC holes drilled vertically at roughly 25 m across-strike and maximum 250 m on-strike. Minimum depth 2 m, max depth 17 m.</li> <li>All diamond drilling has been excluded due to poor recovery.</li> <li>No AC drilling has been excluded.</li> <li>Not applicable for reporting of Mineral Resources.</li> <li>No metal equivalent values were reported.</li> </ul>
<b>Data aggregation methods</b>	<p>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</p> <p>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</p> <p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	
<b>Relationship between mineralisation widths and intercept lengths</b>	<p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</p>	<ul style="list-style-type: none"> <li>All holes are drilled vertically, and the intersections are closely approximate to true width intersections.</li> </ul>
<b>Diagrams</b>	<p>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</p>	<ul style="list-style-type: none"> <li>All plots and plans are included in the main text of the technical report.</li> </ul>
<b>Balanced reporting</b>	<p>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</p>	<ul style="list-style-type: none"> <li>This report precedes public reporting of Exploration Results, thus not applicable for reporting of Mineral Resources</li> </ul>



<p><b>Other substantive exploration data</b></p>	<p><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></p>	<ul style="list-style-type: none"> <li>The surface extents of HM deposits were mapped using a hand-held GPS, supplemented with drilling information.</li> <li>A ground radiometric survey (total radiation) was completed on the EPL area using a GPS scintillometer. The outlines of the HM deposits can clearly be distinguished in certain areas where background radiation of the younger residual material is low. The HM deposits contain small amount of radioactive monazite.</li> <li>Auger drilling programme was conducted on a regional scale, and on a localized scale once a HM deposit was identified. A total of 1,400 holes were drilled in the EPL between 2014 and 2016.</li> <li>Several bulk sampling and metallurgical programmes were undertaken aimed at investigating the physical characteristics of the mineralized sand as well processing and product quality of the different deposits. The work was carried out by SGS, Mintek, and AML—reports on the programmes are available.</li> <li>Material for density determinations was obtained from a programme of 63 pits. Determinations of in situ wet and dry density of the mineralized sand were completed, and the pits were geologically logged, and samples submitted for HLS analysis. The results of these HM analyses are pending as at the time of this report.</li> </ul>
<p><b>Further work</b></p>	<p><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>	<ul style="list-style-type: none"> <li>Further regional auger drilling will be undertaken to delineate subsequently identified targets, in preparation for AC drilling.</li> <li>AC drilling is planned on existing resources and new targets and will form part of a feasibility study programme. The drilling is aimed at adding resources to the project, as well as upgrading the confidence levels of current resources.</li> <li>Identification and redrilling of low recovery AC samples is also planned.</li> <li>A bulk sampling and pilot plant programme is planned as part of the feasibility-study phase of the project. The programme will target all current resources and will be aimed at developing a processing flowsheet for a production phase.</li> </ul>

**Section 3 Estimation and Reporting of Mineral Resources**  
(Criteria listed in Section 1, and where relevant in Section 2, also apply to this section)

<p><b>Criteria</b>      <b>JORC Code explanation</b>      <b>Commentary</b></p>		
<p><b>Database integrity</b></p>	<p><i>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used.</i></p>	<ul style="list-style-type: none"> <li>Initial data capture was onto hard-copy logging sheets and sample inventory lists.</li> <li>This data was manually transcribed into MS Excel™ spreadsheets and later imported into a customized version of Sable Data Warehouse™ database.</li> <li>A review of 10% of logs versus the electronic data was conducted by a senior Site Geologist. No major issues were noted.</li> <li>Grade values are imported directly into modelling software from MS Excel™ format sample sheets provided by laboratories.</li> <li>Initial data manipulation errors were detected during automated processing checks and visual validations were corrected.</li> <li>Collar survey positions were checked against topography DTM surfaces and issues were referred to survey team to correct.</li> <li>The Competent Person believes that the database integrity is of industry standard and acceptable for the Mineral Resource Estimate.</li> </ul>
<p><b>Site visits</b></p>	<p><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.</i></p>	<ul style="list-style-type: none"> <li>No site visit was undertaken by the Competent Person, as no additional drilling or other exploration work has been undertaken on the site since 2016. As soon as exploration work commences, a site visit will be undertaken.</li> </ul>

**Geological interpretation**

*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made.*

*The effect, if any, of alternative interpretations on Mineral Resource estimation.*

*The use of geology in guiding and controlling Mineral Resource estimation.*

*The factors affecting continuity both of grade and geology.*

- The geological interpretation is limited in that it is derived from the 1 m long AC samples and is primarily based on the proportion of slimes and THM in the samples.
- The genetic model for the deposits has resulted in deposits that are dominated by low angle, or thin (<1 m) facies and that the AC drilling tends to mute the detail available for modelling.
- The Project Geologist has produced initial "minable domain" geology models on a sectional basis that has defined domains with observed lower slimes and higher THM values.
- Statistics and interpolation runs have indicated these slimes/HM models to be insufficient as constraints for resource estimation.
- In some cases, these models were able to be refined and used for resource estimation purposes.
- The deposits are dominated by low-lying aeolian dunes as well as strandlines. These geological features are continuous over 100s of metres, with the grade correlating to the trends of the mineralized facies. The drilling data density, as well as secondary auger drilling and mapping, are sufficient to support the current geological models and estimations.
- The total volume of the deposits is generally limited to the vertical extents of the drilling, as the drilling was stopped once clay or bedrock was intersected.
- The resource estimate, per deposit, was constrained using White™ ultimate pit shells. The pit optimization parameters are presented in the table below:

<b>Physicals</b>	
Soil thickness	0.4 m
Operating costs	Dry Units
Surface related costs	
Topsoil	2.0 \$/bcm
Cleaning and rehabilitation	20,000 \$/ha
Mining costs	
Truck and excavator	1.5 \$/t
Processing on site	
Wet Concentrator	1.0 \$/t ore
Administration/other	1.0 \$/t ore
Off site	
Transport	60 \$/t HMC
Mineral Separation	20 \$/t HMC
Royalty	3% of revenue
<b>Recoveries</b>	
HMC from WCP	
HM recovery	90%
HM grade of HMC	92.5%
Overall recovery of	
Ilmenite	80%
Zircon	57%
<b>Mineral prices</b>	
Ilmenite	275 \$/t in product
Zircon	1,850 \$/t in product

<b>Criteria</b>		<b>JORC Code explanation</b>	<b>Commentary</b>
<b>Dimensions</b>	<i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i>		<ul style="list-style-type: none"> <li>The resource dimensions are quoted as (X-Y-Z) with Y orientated along the primary mineralization axis of the models. All measurements are in metres: <ul style="list-style-type: none"> <li>Bimbi: 1,400 x 3,300 x 6.</li> <li>Northeast Bimbi: 1,650 x 1,500 x 5.</li> <li>Mpyupyu: 5,650 x 3,250 x 8.</li> <li>Mposa: 900 x 8,000 x 8.</li> <li>Halala: 300 x 9,000 x 11.</li> </ul> </li> </ul>
<b>Estimation and modelling techniques</b>	<i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.  The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.  The assumptions made regarding recovery of by-products.  Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).  In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.  Any assumptions behind modelling of selective mining units.  Any assumptions about correlation between variables.  Description of how the geological interpretation was used to control the resource estimates.  Discussion of basis for using or not using grade cutting or capping.  The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i>	<ul style="list-style-type: none"> <li>All resource models were estimated using inverse distance weighting to a power of 2, as is commonly applied to mineral sands.</li> <li>All estimations were conducted into blocks aligned with the primary mineralization trends. The blocks were sized to half the average data spacing, which was wider along the dune/trend lines (100 m to 250 m) and significantly closer across the strike of the trends (25 m to 50 m).</li> <li>Due to the curvilinear nature of the mineralization trends, strike lines defining the trends were used to dynamically adjust the search ellipse orientations (dynamic anisotropy)</li> <li>Search ellipses were orientated along the trend line, with nominal 4:1 to 2.5:1 anisotropy ratios. Search volumes were sized such that sufficient samples (min: 3, max 15) were obtained for each block estimate. The majority of each of the deposits were estimated on the first search pass, and with more than ten samples.</li> <li>There is no historical data that is adequate to check against the resource estimates, other than the regional auger data and the historical AC data which serves only to confirm the general mineralization trends.</li> <li>During resource estimation and modelling no account was taken of recovery, other than, where possible, to partition the high- and low-slimes material.</li> <li>While THM is the primary variable of interest, slimes and oversize — which impact recovery and volume — were also estimated into the model, using the same data support and estimation parameters.</li> <li>No capping was applied as it was not considered necessary at this stage of the project.</li> <li>There are weak correlations between THM and slimes, and THM and oversize.</li> <li>Models were validated by comparing global drilling data statistics, in section and plan. A series of 3D moving window plots (were reviewed for significant over-or underestimation.</li> <li>For all the models, the THM, slimes, and oversize estimates appear reasonable, with no obvious conditional bias.</li> <li>The Competent Person believes that the estimation methodology employed is of industry standard and acceptable for the Mineral Resource Estimate.</li> </ul>	
<b>Moisture</b>	<i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i>	<ul style="list-style-type: none"> <li>Tonnage is derived from dry bulk density values and therefore does not include moisture.</li> </ul>	
<b>Cut-off parameters</b>	<i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	<ul style="list-style-type: none"> <li>The cut-off grades used for reporting are derived from initial mineralogical work done prior to drilling, the outputs of an early-stage scoping study, and guidance from TZ Minerals International (TZMI).</li> <li>A higher slimes cut-off has been applied to the Halala deposit, as the samples have been significantly affected by the analytical error at the primary laboratory, and as such the slimes values are overstated by a factor of 2 or 3.</li> </ul>	

JORC Code explanation		Commentary
<b>Criteria</b>		
<b>Mining factors or assumptions</b>	<p><i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i></p>	<ul style="list-style-type: none"> <li>It is assumed that the deposits will be exploited using dry mining methods, and the corresponding anticipated vertical mining selectivity has influenced the selection of 1 m high blocks.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<p><i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i></p>	<ul style="list-style-type: none"> <li>Several metallurgical studies were completed by SGS, Mintek, and AML on representative samples from the different HM deposits of the project. Detailed reports are available for the studies.</li> <li>The studies show that the Lake Chilwa mineralized sand from the different deposits can be processed into high-grade ilmenite and zircon products with high recovery rates.</li> </ul>
<b>Environmental factors or assumptions</b>	<p><i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i></p>	<ul style="list-style-type: none"> <li>Lake Chilwa is recognized as a Ramsar-designated wetland. The Lake Chilwa EPL however, covers grasslands along the lake shore used for grazing and farming, and none of the EPL or deposits falls within the actual wetland.</li> <li>The mineralized sand deposits are populated by rural farming communities and small villages as they are elevated above the surrounding low-lying areas.</li> <li>Mining activities at Chilwa will involve dry mining methods using loaders and trucks with the expectation at this point in the project that all tailings will be backfilled into the mined-out areas. The low slimes levels of slime of the deposits should allow for the slimes directly backfilled with the gravity and oversize tailings.</li> <li>Where slimes levels are above the threshold (to be determined) for direct backfilling, slimes will have to be handled in an appropriate manner.</li> </ul>
<b>Bulk density</b>	<p><i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i></p> <p><i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i></p> <p><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></p>	<ul style="list-style-type: none"> <li>Pits of varying depth were dug and density of the selected lithology (at that level in the pit) was determined using the "In Place Sand Cone Method".</li> <li>Moisture content was also determined but has not been used.</li> <li>There are relatively limited number of density data (68 records). However, the samples are distributed throughout the various deposits and target the potentially minable areas and units.</li> <li>Averaged density values have been applied to each deposit.</li> </ul>

**Criteria Classification**

**JORC Code explanation**

**Commentary**

	<p><i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></p> <p><i>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit.</i></p>	<ul style="list-style-type: none"> <li>• None of the deposits, have been classified higher than Inferred: The limiting factors on resource classification are as follows.</li> <li>• Biased assay results from the primary laboratory have been shown to overstate slimes and understate THM. Previous work indicates factors of 2 to 3 times for slimes, but due to the wide variance associated with the bias it is not possible to adjust or regress the data other than on a global basis. This analytical error means that it is possible to confirm continuity of mineralization, and the historical work implies economic levels of slimes, but it is not possible to have a greater confidence than Inferred in the estimate of contained valuable heavy minerals (VHM).</li> <li>• RC core recovery is, on average, marginally acceptable (average 70%). There are several poor recovery holes and holes with anomalous recovery that need to be redrilled. Poor recovery implies cavitation or sample winnowing, leading to potentially biased sampling, which further reduces the confidence in the resource estimates.</li> <li>• Data-management errors, due to the lack of a functional database, as well as transcription errors, especially associated with the definition of the metallurgical composites and changes in the geological interpretations which impacted the metallurgical composites also serves to limit the confidence in the resource to Inferred.</li> </ul>
<p><b>Audits or reviews</b></p> <p><b>Discussion of relative accuracy/ confidence</b></p>	<p><i>The results of any audits or reviews of Mineral Resource estimates.</i></p> <p><i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i></p> <p><i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></p> <p><i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></p>	<ul style="list-style-type: none"> <li>• The resources have been peer-reviewed internally by AMC Consultants (UK) Limited Principal Geologists and no material failings were identified.</li> <li>• No confidence limits have been applied beyond the basic Inferred classification.</li> <li>• The Competent Person considers that different attributes of the deposits have different levels of confidence. Specifically, the levels of confidence in the deposit limits and hence the volumes of material, are rated as slightly higher than estimates of slimes and THM, which are affected by the documented sampling and assaying issues. Estimates of bulk density, and hence factors for tonnage conversion, are assessed as medium confidence.</li> <li>• No mining has taken place and therefore no production data is available for comparison with the Mineral Resource Estimate.</li> <li>• The Mineral Resource accuracy is communicated through the classification assigned to the deposits.</li> </ul>

# **Appendix B**

## **Competent Person's Consent Form and Compliance Statement**



**AMC Consultants (UK) Limited**  
Registered in England and Wales - Company No 3688365

Building 3, 1st Floor  
Concorde Park, Concorde Road  
Maidenhead SL6 4BY  
United Kingdom

T +44 1628 778 256  
E maidenhead@amcconsultants.com  
W amcconsultants.com



## **Competent Person's Consent Form**

Pursuant to the requirements of ASX Listing Rules 5.6, 5.22 and 5.24 and  
Clause 9 of the JORC Code 2012 Edition (Written Consent Statement)

### **Report name**

Independent Geologist's Report

---

*(Insert name or heading of Report to be publicly released) ('Report')*

Chilwa Minerals Ltd

---

*(Insert name of company releasing the Report)*

Chilwa Heavy Mineral Sands Project, Lake Chilwa, Malawi

---

*(Insert name of the deposit to which the Report refers)*

20 March 2023

---

*(Date of Report)*

## Statement

I,

Mark Burnett

---

confirm that I am the Competent Person for the Report and:

- I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).
- I am a Competent Person as defined by the JORC Code, 2012 Edition, having five years experience that is relevant to the style of mineralisation and type of deposit described in the Report, and to the activity for which I am accepting responsibility.
- I am a Member or Fellow of *The Australasian Institute of Mining and Metallurgy* or the *Australian Institute of Geoscientists* or a 'Recognised Professional Organisation' (RPO) included in a list promulgated by ASX from time to time.
- I have reviewed the Report to which this Consent Statement applies.

I am a full-time employee of

AMC Consultants (UK) Limited

---

and have been engaged by

Chilwa Minerals Ltd

---

*(Insert company name)*

to prepare the documentation for

Chilwa Heavy Mineral Sands Project

---

*(Insert deposit name)*

on which the Report is based, for the period ended

31 July 2022

---

*(Insert date of Resource/Reserve statement)*

I have disclosed to the reporting company the full nature of the relationship between myself and the company, including any issue that could be perceived by investors as a conflict of interest.

I verify that the Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation relating to Mineral Resources.



## Consent

I consent to the release of the Report and this Consent Statement by the directors of:

Chilwa Minerals Ltd

---

*(Insert reporting company name)*



---

Signature of Competent Person:

---

Date: 20 March 2023

---

Professional Membership:  
The Geological Society of London

---

Membership Number:  
0001041787 (CGeol)

---

Signature of Witness:



---

Print Witness Name and Residence:  
(e.g., town/suburb)

Nicholas Szebor

Kidlington, Oxford,  
OX5 1HA, United Kingdom

## Our offices

### Australia

#### Adelaide

Level 1, 12 Pirie Street  
Adelaide SA 5000 Australia

T +61 8 8201 1800  
E [adelaide@amcconsultants.com](mailto:adelaide@amcconsultants.com)

#### Melbourne

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Melbourne Vic 3000 Australia

T +61 3 8601 3300  
E [melbourne@amcconsultants.com](mailto:melbourne@amcconsultants.com)

### Canada

#### Toronto

140 Yonge Street, Suite 200  
Toronto ON M5C 1X6 Canada

T +1 647 953 9730  
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Singapore 018937

T +65 3157 9130  
E [singapore@amcconsultants.com](mailto:singapore@amcconsultants.com)

### United Kingdom

#### Maidenhead

Registered in England and Wales  
Company No. 3688365  
Building 3, 1st Floor  
Concorde Park, Concorde Road  
Maidenhead SL6 4BY United Kingdom

T +44 1628 778 256  
E [maidenhead@amcconsultants.com](mailto:maidenhead@amcconsultants.com)

Registered Office:  
The Kinetic Centre  
Theobald Street  
Elstree  
Hertfordshire WD6 4PG United Kingdom

## **ANNEXURE B - INDEPENDENT LIMITED ASSURANCE REPORT**

29 March 2023

The Directors  
Chilwa Minerals Limited  
Level 9, 200 St Georges Terrace  
Perth WA 6000

Dear Directors

## Independent Limited Assurance Report

### 1 Introduction

- 1.1 Stantons Corporate Finance Pty Ltd ("**Stantons**") was engaged by Chilwa Minerals Limited ("**Chilwa**" or the "**Company**") to prepare this Independent Limited Assurance Report ("**Report**") in relation to certain financial information relating to the Company and its subsidiaries (the "**Group**"). The Report will be included in a Prospectus expected to be distributed in or around April 2023 (the "**Prospectus**").
- 1.2 Chilwa is an Australian mineral exploration company that was incorporated on 1 February 2022 for the purpose of acquiring the Lake Chilwa Heavy Minerals Sands Project located in Malawi (the "**Project**"). Chilwa has entered a share sale agreement with Mota-Engil Investments (Malawi) Limited ("**MEIML**"), the vendor of the Project, and Luso Global Mining BV ("**Luso**"), the holding Company of MEIML whereby the Company will acquire 100% of the issued capital of a special purpose vehicle that holds the tenements that comprise the Project. The Company will issue 19,000,000 ordinary shares and 18,750,000 performance rights to Luso.
- 1.3 The Prospectus relates to the issue of up to 40,000,000 ordinary shares of Chilwa at an issue price of \$0.20 to raise up to \$8,000,000 (before costs) under an Initial Public Offering ("**IPO**") of Chilwa shares on the Australian Securities Exchange ("**ASX**").
- 1.4 This Report has been prepared for inclusion in the Prospectus. We disclaim any assumptions of responsibility for any reliance on this Report or on the historical financial information and pro forma historical financial information ("**Financial Information**") to which it relates for any purpose other than for which it was prepared.
- 1.5 Stantons holds an Australian Financial Services Licence (AFS Licence Number 448697), and our Financial Services Guide ("**FSG**") has been included in this Report in the event that you are a retail investor. Our FSG provides you with information on how to contact us, our services, remuneration, associations and relationships.

### 2 Scope

- 2.1 Chilwa have requested Stantons perform a limited assurance engagement in relation to the Financial Information described below and disclosed in Section 5 of the Prospectus.
- 2.2 The Financial Information is presented in Section 5 of the Prospectus in an abbreviated form, insofar as it does not include all of the presentation and disclosures required by Australian Accounting Standards and other mandatory professional reporting requirements applicable to general purpose financial reports prepared in accordance with the Corporations Act 2001.

- 2.3 Stantons has not been requested to consider the prospects of Chilwa, the securities on offer and related pricing issues, nor the merits and risks associated with becoming a shareholder in Chilwa and accordingly, has not done so nor purports to do so.

#### *Historical Financial Information*

- 2.4 Stantons were requested to review the following historical financial information (the “**Historical Financial Information**”) of Chilwa:
- the audited historical Statements of Profit or Loss and Other Comprehensive Income and Statements of Cash Flows for the period from incorporation on 1 February 2022 to 30 June 2022 and reviewed for the period from 1 July 2022 to 31 December 2022; and
  - the audited consolidated historical Statements of Financial Position as at 30 June 2022 and reviewed as at 31 December 2022.
- 2.5 The Historical Financial Information was prepared in accordance with the stated basis of preparation, being the recognition and measurement principles contained in Australian Accounting Standards and the Company’s adopted accounting policies. The Historical Financial Information was extracted from the financial reports of Chilwa for the period from 1 February 2022 to 30 June 2022, which was audited in accordance with Australian Auditing Standards, and the financial report for the half year to 31 December 2022, which was reviewed.
- 2.6 The financial reports of Chilwa contain unmodified audit opinions for the periods ended 30 June 2022 and 31 December 2022. The audit opinions contained a material uncertainty relating to going concern, on the basis that the Company incurred net losses and operating cash outflows in each period. These conditions indicate the existence of a material uncertainty that may cast significant doubt about the Company’s ability to continue as a going concern and therefore, the Company may be unable to realise its assets and discharge its liabilities in the normal course of business.

#### *Pro Forma Historical Financial Information*

- 2.7 Stantons were requested to review the following pro forma historical financial information (the “**Pro Forma Financial Information**”) of Chilwa:
- the pro forma historical Statement of Financial Position as at 31 December 2022 adjusted for subsequent events.
- 2.8 The Pro Forma Financial Information was derived from the Historical Financial Information of Chilwa, after adjusting for the effects of the pro forma adjustments described in Section 5.6 of the Prospectus. The Pro Forma Financial Information has been subject to review in accordance with the Standard on Assurance Engagements ASAE 3450 “*Assurance Engagements involving Corporate Fundraisings and/or Prospective Financial Information*” and the Auditing Standard on Review Engagements ASRE 2405 “*Review of Historical Financial Information Other than a Financial Report*.”
- 2.9 The stated basis of preparation is the recognition and measurement principles contained in Australian Accounting Standards applied to the Historical Financial Information and the events or transactions to which the pro forma adjustments relate, as described in Section 5.6 and Note 2 of Section 5 of the Prospectus, as if those events or transactions had occurred as at the date of the Historical Financial Information. Due to its nature, the Pro Forma Financial Information does not represent the Company’s actual or prospective financial position.
- 2.10 The Pro Forma Financial Information is presented to illustrate the impact of the events or transactions described in Section 5.6 of the Prospectus on Chilwa’s financial position as at 31 December 2022.
- 2.11 The Historical Financial Information and the Pro Forma Financial Information are presented on a consolidated basis.

### **3 Directors’ Responsibility**

- 3.1 The directors of Chilwa are responsible for the preparation of the Financial Information. This includes responsibility for such internal controls as the directors determine are necessary to enable

the preparation of Financial Information to be free from material misstatement, whether due to fraud or error.

## 4 Our Responsibility

- 4.1 Our responsibility is to express limited assurance conclusions on the Historical Financial Information and the Pro Forma Financial Information. We conducted our engagement in accordance with the Auditing Standard on Review Engagements ASRE 2405 “*Review of Historical Financial Information Other than a Financial Report*” and the Standard on Assurance Engagements ASAE 3450 “*Assurance Engagements involving Corporate Fundraisings and/or Prospective Financial Information*”.
- 4.2 Our limited assurance procedures consisted of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A limited assurance engagement is substantially less in scope than an audit conducted in accordance with Australian Auditing Standards and consequently does not enable us to obtain reasonable assurance that we would become aware of all significant matters that might be identified in a reasonable assurance engagement. Accordingly, we do not express an audit opinion.
- 4.3 Our engagement did not involve updating or re-issuing any previously issued audit or limited assurance reports on any financial information used as a source of the financial information.

## 5 Conclusion

### *Historical Financial Information*

- 5.1 Based on our limited assurance engagement, which is not an audit, nothing has come to our attention that causes us to believe that the Historical Financial Information of Chilwa, comprising:
- the Statements of Profit or Loss and Other Comprehensive Income and Statements of Cash Flow for the periods from 1 February 2022 to 30 June 2022 and from 1 July 2022 to 31 December 2022; and
  - the Statements of Financial Position as at 30 June 2022 and 31 December 2022;
- is not presented fairly, in all material respects, in accordance with the stated basis of preparation.
- 5.2 To the best of our knowledge and belief, there have been no other material items, transactions or events involving Chilwa subsequent to 31 December 2022 that have come to our attention during the course of our review which would cause the Historical Financial Information presented in Section 5 of the Prospectus to be misleading.

### *Pro Forma Financial information*

- 5.3 Based on our limited assurance engagement, which is not an audit, nothing has come to our attention that causes us to believe that the Pro Forma Financial Information, comprising:
- the pro forma historical Statement of Financial Position of Chilwa as at 31 December 2022, adjusted for subsequent events;
- is not presented fairly, in all material respects, in accordance with the stated basis of preparation.
- 5.4 To the best of our knowledge and belief, there have been no other material items, transactions or events involving Chilwa subsequent to 31 December 2022, besides those disclosed in Section 5 of the Prospectus, that have come to our attention during the course of our review which would cause the Pro Forma Financial Information presented in the Section 5 of the Prospectus to be misleading.

## Independence

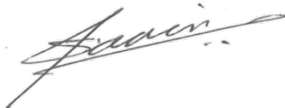
- 5.5 At the date of this Report, Stantons does not have any interest in Chilwa either directly or indirectly other than in connection with the preparation of this Report, for which professional fees will be received.

## Disclosures

- 5.6 This Report has been prepared, and included in the Prospectus, to provide investors with general information only and does not consider the objectives, financial situation or needs of any specific investor. It is not intended to be a substitute for professional advice and potential investors should not make specific investment decisions in reliance on the information contained in this Report. Before acting or relying on any information, potential investors should consider whether it is appropriate for their objectives, financial situation or needs.
- 5.7 Without modifying our conclusions, we draw attention to Section 2 of this Report, which describes the purpose of the Historical Financial Information and Pro Forma Financial Information, being for inclusion in the Prospectus. As a result, the Historical Financial Information and Pro Forma Financial Information may not be suitable for use for another purpose.
- 5.8 Stantons consents to the inclusion of this Report in the Prospectus in the form and context in which it is included. At the date of this Report this consent has not been withdrawn. However, Stantons has not authorised the issue of the Prospectus. Accordingly, Stantons makes no representation regarding, and takes no responsibility for, any other statements or material in or omissions from the Prospectus.

Yours faithfully

**STANTONS CORPORATE FINANCE PTY LTD**



**Samir Tirodkar**  
**West Perth**  
**29 March 2023**

## Financial Services Guide

Dated 29 March 2023

### Stantons Corporate Finance Pty Ltd (Trading as Stantons Corporate Finance)

Stantons Corporate Finance Pty Ltd (ABN 42 128 908 289 and AFSL Licence No 448697) (“**Stantons**” or “**we**” or “**us**” or “**ours**” as appropriate) has been engaged to issue general financial product advice in the form of a report to be provided to you.

### Financial Services Guide

In the above circumstances, we are required to issue to you, as a retail client, a Financial Services Guide (“**FSG**”). This FSG is designed to help retail clients make a decision as to their use of the general financial product advice and to ensure that we comply with our obligations as financial services licensees.

This FSG includes information about:

- a) who we are and how we can be contacted;
- b) the services we are authorized to provide under our **Australian Financial Services Licence, Licence No: 448697**;
- c) remuneration that we and/or our staff and any associated receive in connection with the general financial product advice;
- d) any relevant associations or relationships we have; and
- e) our complaints handling procedures and how you may access them.

### Financial services we are licensed to provide

We hold an Australian Financial Services Licence which authorises us to provide financial product advice in relation to:

- Securities (such as shares, options and debt instruments)

We provide financial product advice by virtue of an engagement to issue a report in connection with a financial product of another person. Our report will include a description of the circumstances of our engagement and identify the person who has engaged us. You will not have engaged us directly but will be provided with a copy of the report as a retail client because of your connection to the matters in respect of which we have been engaged to report.

Any report we provide is provided on our own behalf as a financial services licensee authorised to provide the financial product advice contained in the report.

### General Financial Product Advice

In our report, we provide general financial product advice, not personal financial product advice, because it has been prepared without taking into account your personal objectives, financial situation or needs. You should consider the appropriateness of this general advice having regard to your own objectives, financial situation and needs before you act on the advice. Where the advice relates to the acquisition or possible acquisition of a financial product, you should also obtain a product disclosure statement relating to the product and consider that statement before making any decision about whether to acquire the product. Where you do not understand the matters contained in the Independent Limited Assurance Report, you should seek advice from a registered financial adviser.

### Benefits that we may receive

We charge fees for providing reports. These fees will be agreed with, and paid by, the person who engages us to provide the report. Fees will be agreed on either a fixed fee or time cost basis. Our fee for preparing this report is expected to be \$10,000 exclusive of GST.



You have a right to request for further information in relation to the remuneration, the range of amounts or rates of remuneration and you can contact us for this information.

Except for the fees referred to above, neither Stantons, nor any of its directors, employees or related entities, receive any pecuniary benefit or other benefit, directly or indirectly, for or in connection with the provision of the report.

## Referrals

We do not pay commissions or provide any other benefits to any person for referring customers to us in connection with the reports that we are licensed to provide.

## Associations and relationships

Stantons is ultimately a wholly owned subsidiary of SIAC, a professional advisory and accounting practice. From time to time, Stantons and SIAC (that trades as Stantons International) and/or their related entities may provide professional services, including audit, accounting and financial advisory services, to financial product issuers in the ordinary course of its business.

## Remuneration or other benefits received by our employees and contractors

Stantons and SIAC employees and contractors are eligible for bonuses based on overall performance but not directly in connection with any engagement for the provision of a report.

## Complaints resolution

### *Internal complaints resolution process*

As the holder of an Australian Financial Services Licence, we are required to have a system for handling complaints from persons to whom we provide financial product advice. All complaints must be in writing, addressed to:

The Complaints Officer  
Stantons Corporate Finance Pty Ltd  
Level 2  
40 Kings Park Road  
WEST PERTH WA 6005

When we receive a written complaint, we will record the complaint, acknowledge receipt of the complaints within 10 days and investigate the issues raised. As soon as practical, and not more than 45 days after receiving the written complaint, we will advise the complainant in writing of our determination.

### *Referral to External Dispute Resolution Scheme*

A complainant not satisfied with the outcome of the above process, or our determination, has the right to refer the matter to the Australian Financial Complaints Authority (“**AFCA**”). AFCA has been established to provide free advice and assistance to consumers to help in resolving complaints relating to the financial services industry.

Further details about AFCA are available at the AFCA website [www.afca.org.au](http://www.afca.org.au) or by contacting them directly via the details set out below.

Australian Financial Complaints Authority Limited  
GPO Box 3  
MELBOURNE VIC 3001

Telephone: 1800 931 678

Stantons confirms that it has arrangements in place to ensure it continues to maintain professional indemnity insurance in accordance with s.912B of the Corporations Act 2001 (as amended). In particular our Professional Indemnity insurance, subject to its terms and conditions, provides indemnity up to the sum insured for Stantons and our authorised representatives / representatives / employees in respect of our authorisations and obligations under our Australian Financial Services Licence. This insurance will continue

to provide such coverage for any authorised representative / representative / employee who has ceased work with Stantons for work done whilst engaged with us.

### **Contact details**

You may contact us using the details set out at above or by phoning (08) 9481 3188 or faxing (08) 9321 1204.

## **ANNEXURE C – INDEPENDENT EXPERT'S REPORT**



**CHILWA MINERALS LIMITED**  
**Independent Expert's Report**

**OPINION: NOT FAIR BUT REASONABLE**

24 March 2023



## Financial Services Guide

24 March 2023

**BDO Corporate Finance (WA) Pty Ltd** ABN 27 124 031 045 ('we' or 'us' or 'ours' as appropriate) has been engaged by Chilwa Minerals Limited ('Chilwa' or 'the Company') to provide an independent expert's report on the proposal to issue 18.75 million performance rights to the vendors of the Chilwa Heavy Metals Minerals Sands Project and 6.25 million performance rights to Directors and Management of Chilwa, as set out in the Company's Prospectus ('Transaction Document'). Australian Securities Exchange ('ASX') Guidance Note 19 *Performance Securities* requires our Report to be included in the Company's Prospectus to assist non-participating security holders of the Company as to whether the proposal to grant the performance rights is fair and reasonable.

You are being provided with a copy of our report because you are a shareholder of Chilwa, and this Financial Services Guide ('FSG') is included in the event you are also classified under the Corporations Act 2001 ('the Act') as a retail client.

Our report and this FSG accompanies the Transaction Document required to be provided to you by Chilwa to assist you in deciding on whether or not to approve the proposal.

### Financial Services Guide

This FSG is designed to help retail clients make a decision as to their use of our general financial product advice and to ensure that we comply with our obligations as a financial services licensee.

This FSG includes information about:

- ◆ Who we are and how we can be contacted;
- ◆ The services we are authorised to provide under our Australian Financial Services Licence No. 316158;
- ◆ Remuneration that we and/or our staff and any associates receive in connection with the general financial product advice;
- ◆ Any relevant associations or relationships we have; and
- ◆ Our internal and external complaints handling procedures and how you may access them.

### Information about us

We are a member firm of the BDO network in Australia, a national association of separate entities (each of which has appointed BDO (Australia) Limited ACN 050 110 275 to represent it in BDO International). The financial product advice in our report is provided by BDO Corporate Finance (WA) Pty Ltd and not by BDO or its related entities. BDO and its related entities provide professional services primarily in the areas of audit, tax, consulting, mergers and acquisition, and financial advisory services.

We and BDO (and its related entities) might from time to time provide professional services to financial product issuers in the ordinary course of business and the directors of BDO Corporate Finance (WA) Pty Ltd may receive a share in the profits of related entities that provide these services.

### Financial services we are licensed to provide

We hold an Australian Financial Services Licence that authorises us to provide general financial product advice for securities to retail and wholesale clients, and deal in securities for wholesale clients. The authorisation relevant to this report is general financial product advice.

When we provide this financial service we are engaged to provide an expert report in connection with the financial product of another person. Our reports explain who has engaged us and the nature of the report we have been engaged to provide. When we provide the authorised services we are not acting for you.

### General Financial Product Advice

We only provide general financial product advice, not personal financial product advice. Our report does not take into account your personal objectives, financial situation or needs. You should consider the appropriateness of this general advice having regard to your own objectives, financial situation and needs before you act on the advice. If you have any questions, or don't fully understand our report you should seek professional financial advice.

## **Fees, commissions and other benefits that we may receive**

We charge fees for providing reports, including this report. These fees are negotiated and agreed with the person who engages us to provide the report. Fees are agreed on an hourly basis or as a fixed amount depending on the terms of the agreement. The fee payable to BDO Corporate Finance (WA) Pty Ltd for this engagement is approximately \$30,000

Except for the fees referred to above, neither BDO, nor any of its directors, employees or related entities, receive any pecuniary benefit or other benefit, directly or indirectly, for or in connection with the provision of the report and our directors do not hold any shares in Chilwa.

## **Remuneration or other benefits received by our employees**

All our employees receive a salary. Our employees are eligible for bonuses based on overall productivity but not directly in connection with any engagement for the provision of a report. We have received a fee from Chilwa for our professional services in providing this report. That fee is not linked in any way with our opinion as expressed in this report.

## **Referrals**

We do not pay commissions or provide any other benefits to any person for referring customers to us in connection with the reports that we are licensed to provide.

## **Complaints resolution**

### *Internal complaints resolution process*

As the holder of an Australian Financial Services Licence, we are required to have a system for handling complaints from persons to whom we provide financial product advice. We are also committed to meeting your needs and maintaining a high level of client satisfaction. If you are unsatisfied with a service we have provided you, we have avenues available to you for the investigation and resolution of any complaint you may have.

To make a formal complaint, please use the Complaints Form. For more on this, including the Complaints Form and contact details, see the [BDO Complaints Policy](#) available on our website.

When we receive a complaint we will record the complaint, acknowledge receipt of the complaint in writing within one business day or, if the timeline cannot be met, then as soon as practicable and investigate the issues raised. As soon as practical, and not more than 30 days after receiving the complaint, we will advise the complainant in writing of our determination.

## **Referral to External Dispute Resolution Scheme**

We are a member of the Australian Financial Complaints Authority (AFCA) which is an External Dispute Resolution Scheme. Our AFCA Membership Number is 12561. Where you are unsatisfied with the resolution reached through our Internal Dispute Resolution process, you may escalate this complaint to AFCA using the below contact details:

Mail:	GPO Box 3, Melbourne, VIC 3001
Free call:	1800 931 678
Website:	<a href="http://www.afca.org.au">www.afca.org.au</a>
Email:	<a href="mailto:info@afca.org.au">info@afca.org.au</a>
Interpreter Service:	131 450



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Appendix 1 - Glossary and copyright notice

Appendix 2 - Valuation Methodologies

© 2023 BDO Corporate Finance (WA) Pty Ltd

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24 March 2023

The Directors  
Chilwa Minerals Limited  
Level 9, 200 St Georges Terrace  
Perth WA, 6000

Dear Directors,

## INDEPENDENT EXPERT'S REPORT

### 1. Introduction

The directors of Chilwa Minerals Limited ('**Chilwa**' or '**the Company**') have requested that BDO Corporate Finance (WA) Pty Ltd ('**BDO**') prepare an independent expert's report ('**IER**' or '**our Report**') to express an opinion on whether the proposed issue of:

- 18.75 million performance securities to Luso Global Mining BV ('**Luso**') the parent company of the vendor of the Chilwa Heavy Metals Minerals Sands Project ('**Chilwa Project**'), being Mota-Engil Investments (Malawi) Limited ('**MEIML**' or '**the Vendor**'); and
- 6.25 million performance securities to the Managing Director ('**MD**'), Non-Executive Chairman and management of Chilwa under the Employee Securities Incentive Plan

Collectively the '**Performance Securities**', is fair and reasonable to the prospective and non-participating security holders of Chilwa ('**Security Holders**') ('**Proposed Issue**').

Our Report has been prepared to accompany the Company's Prospectus for the issue of 40,000,000 shares at \$0.20 per share to raise up to \$8,000,000 before costs ('**the Offer**').

Our Report provides an opinion on whether the proposed issue of the Performance Securities is fair and reasonable to Security Holders. According to Australian Securities Exchange ('**ASX**') Guidance Note 19 *Performance Securities* ('**GN 19**'), a performance security is a security that converts, or may convert, into a given number of ordinary shares with all the usual rights attached if and when a nominated performance milestone is achieved, but otherwise has limited rights until then.

The performance milestones attached to the Performance Securities ('**Performance Milestones**') are further detailed in Section 4 of our Report.

All currencies in our Report are quoted in Australian Dollars unless otherwise stated.

### 2. Summary and Opinion

#### 2.1 Requirement for the report

The directors of Chilwa have requested that BDO prepare an IER ('**our Report**') to express an opinion as to whether or not the proposed issue of the Performance Securities is fair and reasonable to Security Holders.



Our Report is required pursuant to ASX GN 19 because the Company proposes to have performance securities on issue at the date of admission which, in aggregate if the Performance Milestone is achieved, will convert to a number of ordinary shares which is greater than 10% of the number of ordinary shares that the Company proposes to have on issue at the date of admission.

## 2.2 Approach

Our Report has been prepared having regard to ASX GN 19 and Australian Securities and Investments Commission ('ASIC') Regulatory Guides Regulatory Guide 111 '*Content of Expert's Reports*' ('RG 111'), 112 '*Independence of Experts*' ('RG 112') and 170 '*Prospective Financial Information*' ('RG 170') and Information Sheet 214: *Mining and Resources: Forward-looking Statements* ('IS 214').

In arriving at our opinion, we have assessed the terms of the Performance Securities as outlined in the body of our Report. We have considered:

- whether there are sufficient reasonable grounds on which to compare the value of a Chilwa share as at the admission date (prior to the vesting of the Performance Securities), to the value of a Chilwa share following the achievement of the vesting conditions attached to the Performance Securities and the resulting issue of the ordinary shares on conversion of the Performance Securities; and
- other factors which we consider to be relevant to Security Holders in their assessment of the proposed issue of the Performance Securities, including how the total value of shares that will vest to the MD and Non-Executive Chairman, assuming all Performance Milestones are met, together with their fixed salaries, compares to remuneration packages of directors and executives of comparable companies in the energy and resources sector.

## 2.3 Opinion

We have considered the terms of the Performance Securities as outlined in the body of our Report and have concluded that the proposed issue of the Performance Securities is not fair but reasonable to Security Holders.

In our opinion, the proposed issue of the Performance Securities is not fair because we are unable to opine on the impact on the value of a Chilwa share should the Performance Milestones be achieved. This is because we do not have reasonable grounds to make forward looking assumptions that would be required to quantify the value of a Chilwa share following the achievement of the Performance Milestones. Therefore, by default, we consider the issue of the Performance Securities to be not fair.

However, we do consider the issue of the Performance Securities to be reasonable because the advantages are greater than the disadvantages. In particular, we consider it likely that the achievement of the Performance Milestones will likely be value accretive to Security Holders.

Furthermore, we have undertaken an assessment on how the total value of shares that will vest to the MD and Non-Executive Chairman, assuming all Performance Milestones are met, together with their fixed salaries, compares to remuneration packages of directors and executives of comparable companies in the energy and resources sector. Based on our assessment and advice provided by BDO's remuneration specialist ('**BDO REM Specialist**'), we consider the Performance Securities issued in connection with the remuneration packages of the MD and Non-Executive Chairman to be reasonable.

## 2.4 Fairness

In our opinion, as detailed in Section 9, and having regard to the guidance set out in ASX GN 19, RG 111, RG 170 and IS 214, we consider the proposed issue of the Performance Securities to be not fair to Security Holders.

We do not have reasonable grounds to make forward looking assumptions on the future value of the Company, should the Performance Milestone be achieved. Therefore, we are unable to opine on the future value of the Company.

A summary of our fairness assessment is outlined below:

Performance Milestone	Performance Milestone details	Fairness Test	Description	Conclusion
Milestone 1	The Company announcing a JORC compliant Indicated Resource of 3 million tonnes total heavy mineral from the Chilwa Project by no later than 24 months from the grant of the performance securities.	Unable to opine on future value of the Company	No reasonable grounds to make forward looking assumptions on the future value of the Company should the Milestone be achieved	Not Fair
Milestone 2	The Company announcing the completion of a Pre-Feasibility Study (as defined in the JORC Code) that recommends further proceeding with the Chilwa Project by no later than 48 months from the grant of the performance securities.	Unable to opine on future value of the Company	No reasonable grounds to make forward looking assumptions on the future value of the Company should the Milestone be achieved	Not Fair
Milestone 3	The Company announcing the completion of a Feasibility Study (as defined in the JORC Code) that recommends further proceeding with the Chilwa Project by no later than 48 months from the grant of the performance securities.	Unable to opine on future value of the Company	No reasonable grounds to make forward looking assumptions on the future value of the Company should the Milestone be achieved	Not Fair
Milestone 4	The Company announcing that a decision to mine the Chilwa Project has been made by no later than 60 months from the grant of the performance securities.	Unable to opine on future value of the Company	No reasonable grounds to make forward looking assumptions on the future value of the Company should the Milestone be achieved	Not Fair

Further details of our Fairness assessment are detailed in Sections 9 of our Report.

## 2.5 Reasonableness

We have considered the analysis in Section 10 of our Report, in terms of both the:

- advantages and disadvantages of the proposed issue of the Performance Securities; and

- other considerations, including the position of Security Holders should the Performance Milestone not be met and the Performance Securities not vest.

Following these considerations, it is our opinion that on balance, the advantages of issuing the Performance Securities and the achievement of meeting the Performance Milestone are greater to Security Holders than the disadvantages.

Accordingly, in the absence of any other relevant information and/or an alternate proposal, we believe that the proposed issue of the Performance Securities is reasonable for Security Holders.

The respective advantages and disadvantages considered are summarised below:

ADVANTAGES AND DISADVANTAGES			
Section	Advantages	Section	Disadvantages
10.1	The Performance Milestones are structured in such a way to align the interests of Security Holders and the holders of the Performance Securities	10.2	Potential dilution of Security Holders' interests if the Performance Milestones are met and the Performance Securities vest and ordinary shares are issued
10.1	The Performance Securities are being issued to the Vendor as consideration for the acquisition of the Chilwa Project. As the consideration is non-cash, it allows Chilwa to preserve the cash raised under the Offer to progress the Chilwa Project	10.2	The terms of the Performance Securities are not fair. Despite being not fair, the achievement of the Performance Milestones may be value accretive.
10.1	By issuing the Performance Securities to the MD, Non-Executive Chairman and management, it allows the Company to retain its people and to preserve cash raised under the Offer for progressing its Chilwa Project		
10.1	Issue of the Performance Securities to the Vendor results in exposure to a potentially economically viable project		
10.1	The Performance Securities to be issued to the directors and management will result in minimal dilution to shareholders if vested		

Other key matters we have considered include:

Section	Description
10.3	Consequences of the Performance Securities not being issued

Section	Description
10.4	Consequences of the Performance Milestones being achieved
10.5	Other Considerations

### 3. Scope of the Report

#### 3.1 Purpose of the Report

ASX Listing Rule 6.1 requires that the terms that apply to each class of equity securities must, in ASX's opinion, be appropriate and equitable. ASX GN 19 requires an expert to be commissioned to prepare an independent expert's report that complies with RG 111, and to express an opinion on whether the issue of the Performance Securities is fair and reasonable to Security Holders.

Relevantly, under GN 19 the requirement for an independent expert report arises if:

1. the entity is applying for quotation on the ASX, and
2. it has or proposes to have performance securities on issue at the date of its admission to quotation, and
3. the number of ordinary shares into which those performance securities will convert in aggregate if the applicable milestone is achieved, is greater than 10% of the number of ordinary shares the entity proposes to have on issue at the date of its admission to quotation (taking into account any ordinary shares that the entity may be issuing in connection with its listing).

The Directors of Chilwa have engaged BDO as an independent expert as the issue of the Performance Securities on admission to the ASX will represent in excess of 10% of the issued capital of Chilwa (see Section 4).

#### 3.2 Regulatory guidance

Neither the Listing Rules nor the Corporations Act defines the meaning of 'fair and reasonable'. In determining whether the proposed issue of the Performance Securities is fair and reasonable, we have had regard to the views expressed by ASIC in RG 111 which provides guidance as to what matters an independent expert should consider to assist security holders to make informed decisions about transactions.

One of the matters to be considered under RG 111 is whether a proposed issue constitutes a control transaction. In circumstances where a transaction is considered a control transaction, RG 111 requires the expert to consider the value inclusive of a control premium. We do not consider the issue or vesting of the Performance Securities to be a control transaction.

We are also required to have regard to ASX GN 19 which states:

*"in determining their opinion on fairness and reasonableness, ASX would expect the independent expert to assume that the relevant performance milestone(s) have been met, assess the impact that would have on the value of the entity compared to the situation if the relevant performance milestone(s) were not met, and then determine whether the resulting number of ordinary shares to be issued by the entity to the holder of the performance shares is fair and reasonable in the circumstances.*

*ASX would have no objection to an independent expert expressing a broader view on an issue of performance securities, for example, a statement that while the expert is not able to conclude that the issue is fair or reasonable (as applicable), they regard it as being in the interests of the entity and non-participating security holders to proceed with the issue.”*

### **3.3 Adopted basis of evaluation**

RG 111 states that a transaction is fair if the value of the offer price or consideration is equal to or greater than the value of the securities subject of the offer.

In order to conduct this assessment for the requirements under ASX GN 19, we are required to compare the value of a Chilwa share prior to the Company achieving the Performance Milestone, with the value of a Chilwa share following the achievement of the respective Performance Milestones. This comparison should be made assuming a knowledgeable and willing, but not anxious buyer, and a knowledgeable and willing, but not anxious seller acting at arm’s length. Following this, ASX GN 19 states that we must consider, based on the results of the above comparison, whether the resulting number of shares to be issued to the holder of the performance shares is fair and reasonable.

RG 111 states that a transaction is reasonable if it is fair. It might also be reasonable if despite being ‘not fair’ the expert believes that there are sufficient reasons for security holders to accept the offer in the absence of any alternate options.

Having regard to the above, BDO sought to conduct this comparison in two parts:

- A comparison between the value of a Chilwa share as at the admission date and the value of a Chilwa share following the achievement of the respective Performance Milestones and the resulting issue of the ordinary shares on conversion of the Performance Securities (fairness - see Section 9 ‘Is the Proposed Issue Fair?’); and
- An investigation into other significant factors to which Security Holders might give consideration, after reference to the value derived above (reasonableness - see Section 10 ‘Is the Proposed Issue Reasonable?’).

This assignment is a Valuation Engagement as defined by Accounting Professional & Ethical Standards Board professional standard APES 225 ‘Valuation Services’ (‘APES 225’).

A Valuation Engagement is defined by APES 225 as follows:

*‘an Engagement or Assignment to perform a Valuation and provide a Valuation Report where the Valuer is free to employ the Valuation Approaches, Valuation Methods, and Valuation Procedures that a reasonable and informed third party would perform taking into consideration all the specific facts and circumstances of the Engagement or Assignment available to the Valuer at that time.’*

This Valuation Engagement has been undertaken in accordance with the requirements set out in APES 225.

## 4. Outline of the Performance Securities

Chilwa is proposing to issue a total of 25 million Performance Securities. A portion of these Performance Securities will be issued to Luso, the parent company of the Vendor of the Chilwa Project, and the other portion will be issued to Directors and management of Chilwa. A breakdown of the split is set out below:

- 18.75 million performance securities will be issued to Luso, as partial consideration for the Chilwa Project; and
- 6.25 million performance securities will be issued to directors and management of Chilwa under the Employee Securities Incentive Plan.

The Performance Securities will be issued in four different classes, each with a separate performance milestone. A summary of the number of securities to be issued per class and the performance milestone attached to each is set out below.

Class	Performance Milestone	Milestone Hurdle	Vesting Period	Performance Securities
Class A	Milestone 1	See below	24 months	10,000,000
Class B	Milestone 2	See below	48 months	5,000,000
Class C	Milestone 3	See below	48 months	5,000,000
Class D	Milestone 4	See below	60 months	5,000,000
Total				25,000,000

**‘Milestone 1’:** The Company announcing a JORC compliant Indicated Resource of 3 million tonnes total heavy mineral (‘THM’) from the Chilwa Project by no later than 24 months from the grant of the performance securities.

**‘Milestone 2’:** The Company announcing the completion of a Pre-Feasibility Study (as defined in the JORC Code) that recommends further proceeding with the Chilwa Project by no later than 48 months from the grant of the performance securities.

**‘Milestone 3’:** The Company announcing the completion of a Feasibility Study (as defined in the JORC Code) that recommends further proceeding with the Chilwa Project by no later than 48 months from the grant of the performance securities.

**‘Milestone 4’:** The Company announcing that a decision to mine the Chilwa Project has been made by no later than 60 months from the grant of the performance securities.

Each Performance Security will convert into one share in Chilwa, upon achievement of the respective Performance Milestones before the end of the vesting period, failing which these Performance Securities will lapse. The issue price of the Performance Securities is \$0.0001 per Performance Security.

### Performance Securities to be issued to Luso

Chilwa has entered into a share sale agreement with MEIML and Luso, pursuant to which, the Company will issue 19 million shares and 18.75 million performance securities to Luso as consideration for the acquisition of the Chilwa Project. Further details of the share sale agreement can be found in section 7.2 of the Prospectus.

A summary of the class and number of performance securities to be issued to Luso as consideration for the acquisition, is set out below.

Class	Milestone*	Vendor performance securities
Class A	Milestone 1	7,500,000
Class B	Milestone 2	3,750,000
Class C	Milestone 3	3,750,000
Class D	Milestone 4	3,750,000
<b>Total</b>		<b>18,750,000</b>

\*See definitions above

Whilst these performance securities vest upon milestones being reached, they will only convert to shares in circumstances that Luso either does not increase its voting power or does so using the “3% creep” exception to the prohibition in the Corporations Act to a person increasing their voting power over 20%.

As vendor for the Chilwa Project, MEIML (though its 100% parent Luso) will be subject to the following escrow periods:

- 24 months escrow under the Listing Rules for all shares and performance securities issued; and
- a further 12 months voluntary escrow for 50% of the shares issued (being 8,500,000 shares).

#### Performance Securities to be Issued to Directors and management of Chilwa

The Company proposes to issue 6.25 million Performance Securities under the Company’s Employee Securities Incentive Plan to the Directors and management of Chilwa.

A summary of the class and number of performance securities to be issued to directors and management is set out below.

Class	Milestone*	Managing Director Performance securities	Non-executive Chairman Performance securities	Management Performance securities	Total Performance securities
Class A	Milestone 1	1,721,740	528,260	250,000	2,500,000
Class B	Milestone 2	765,218	234,782	250,000	1,250,000
Class C	Milestone 3	956,521	293,479	-	1,250,000
Class D	Milestone 4	956,521	293,479	-	1,250,000
<b>Total</b>		<b>4,400,000</b>	<b>1,350,000</b>	<b>500,000</b>	<b>6,250,000</b>

\*See definitions above

The performance securities issued to Directors will be subject to 24 months escrow. The performance securities issued to employees are not expected to be subject to any escrow (although under their terms may not be transferred; only shares issued upon vesting of such performance securities are transferrable).

#### Capital Structure

Each Performance Security represents the right to acquire a fully paid ordinary share in the Company, subject to the satisfaction of the Performance Milestone.

As detailed in Section 3.1, ASX GN 19 requires an expert to be commissioned to prepare an independent expert’s report that complies with RG 111, and to express an opinion on whether the issue of the Performance Securities is fair and reasonable to Security Holders.

Relevantly, under ASX GN 19 the requirement for an independent expert report arises if:

1. the entity is applying for quotation on the ASX, and

2. it has or proposes to have performance securities on issue at the date of its admission to quotation, and
3. the number of ordinary shares into which those performance securities will convert in aggregate if the applicable milestone is achieved, is greater than 10% of the number of ordinary shares the entity proposes to have on issue at the date of its admission to quotation (taking into account any ordinary shares that the entity may be issuing in connection with its listing).

For illustrative purposes, we have presented below the number of ordinary shares into which the Performance Securities will convert, as a proportion of the number of shares that are proposed to be on issue at the date of Chilwa's admission to quotation on a minimum subscription basis. We have not included any dilution that may result from the exercise of options.

Description	Number of ordinary shares
Existing shares on issue	8,200,001
Shares to be issued to Luso as consideration for the acquisition of the Chilwa Project	19,000,000
Shares issued under the Offer	40,000,000
<b>Number of ordinary shares on issue prior to the issue of the Performance Securities (a)</b>	<b>67,200,001</b>
Performance Securities	25,000,000
<b>Number of ordinary shares into which the Performance Securities will convert (b)</b>	<b>25,000,000</b>
<b>Number of ordinary shares into which the Performance Securities will convert, as a % of the number of shares that are proposed to be on issue at the date of Chilwa's admission to quotation (b/(a+b))</b>	<b>37.20%</b>

\*On a minimum subscription basis

Source: BDO analysis

As set out above, in the event that the Performance Milestones are met, the number of ordinary shares into which the Performance Securities will convert equates to approximately 37.20% of the total number of Chilwa shares that are proposed to be on issue at the date of the Company's admission to quotation.

The table below sets out the impact of the maximum issue of the Performance Securities on the percentage of issued capital held by Luso, the Directors of Chilwa and the other shareholders assuming that the Performance Securities are converted to ordinary shares and no other shares are issued:

Description	Luso	Managing Director	Non-Executive Chairman	Others	Total
Shares on issue at the date of our Report	1,600,000	100,001	-	6,500,000	8,200,001
Shares issued to Luso as consideration for the acquisition of the Chilwa Project	19,000,000	-	-	-	19,000,000
Shares issued as part of the Offer	-	-	-	40,000,000	40,000,000
<b>Shares on issue upon Chilwa's admission to quotation (a)</b>	<b>20,600,000</b>	<b>100,001</b>	<b>-</b>	<b>46,500,000</b>	<b>67,200,001</b>
<b>% holdings following Chilwa's admission to quotation</b>	<b>30.65%</b>	<b>0.15%</b>	<b>0.00%</b>	<b>69.20%</b>	<b>100.00%</b>
<b>Performance Securities:</b>					
Milestone 1	7,500,000	1,721,740	528,260	250,000	10,000,000
Milestone 2	3,750,000	765,218	234,782	250,000	5,000,000
Milestone 3	3,750,000	956,521	293,479	-	5,000,000



Description	Luso	Managing Director	Non-Executive Chairman	Others	Total
Milestone 4	3,750,000	956,521	293,479	-	5,000,000
Number of Performance Securities	18,750,000	4,400,000	1,350,000	500,000	25,000,000
Number of shares on issue following Chilwa's admission to quotation and vesting of Performance Securities (a+b)	39,350,000	4,500,001	1,350,000	47,000,000	92,200,001
<i>% holdings following the vesting of the Performance Securities</i>	<i>42.68%</i>	<i>4.88%</i>	<i>1.46%</i>	<i>50.98%</i>	<i>100.00%</i>

Under the Corporations Act, Luso (or its associates) can only increase its holding from 30.65% in certain circumstances, including with shareholder approval or relying on the 3% creep. This assumes that Luso satisfies one of the exceptions.

## 5. Profile of Chilwa

### 5.1 Overview

Chilwa is a public unlisted company that was incorporated in February 2022 for the purpose of acquiring 100% of the Chilwa Project located in Malawi, Africa. The Company currently proposes to undertake an Initial Public Offering of 40,000,000 shares at \$0.20 per share to raise \$8.0 million to fund exploration and development activities on the Chilwa Project.

The Company's Board of Directors and senior management comprise of:

- Philip Lucas- Non-Executive Chairman;
- Cadell Buss -Managing Director;
- Alexander Shaw -Non-Executive Director (nominee of MEIML);
- Manuel Mota - Non-Executive Director (nominee of MEIML); and
- John Lewis - Company Secretary and Chief Financial Officer.

The Company entered into a share sale agreement with MEIML and Luso, under which, it will acquire 100% of the issued share capital of a special purpose vehicle that will hold the Exploration Licenses which have been granted over the area of the Chilwa Project, together with all associated geological and other information associated with the Chilwa Project. Further details on the share sale agreement can be found in section 7.2 of the Prospectus.

The acquisition of the Chilwa Project is subject to the satisfaction of several conditions, including the Company satisfying all the conditions associated with the quotation of its securities on the ASX.

Chilwa is proposing to undertake a \$4.5 million exploration program to increase and better define the current resource and progress studies.

### 5.2 Overview of the Chilwa Project

The Chilwa Project is located on the shores of Lake Chilwa in Malawi. The Chilwa Project is located on two separate Exploration Licenses, being:

- EL 0671/22 (Chilwa Island) - this license covers an area of approximately 12.84 square kilometres ('km<sup>2</sup>'). The license was granted in September 2022 and is valid for three years with an option to extend. No past exploration has been undertaken at Chilwa Island for heavy mineral sands deposits. Chilwa has no intention to explore for or mine heavy mineral sands deposits on Chilwa Island at this stage; and
- EL 0670/22 (Lake Chilwa) - this license covers an area of 865.56 km<sup>2</sup>. The license was granted in September 2022 and is valid for three years with an option to extend. Exploration at this site is expected to commence in late 2022.

These licences grant the holder exclusive rights to carry our exploration for heavy mineral sands over a total area of 878.70 km<sup>2</sup>.

The Chilwa Project currently contains four known prospects being:

- Halala / Namanja: this prospect is to the north of Lake Chilwa which is incised by several rivers. This has an east-west strike of 20 kilometres. The dune is split into three areas.

- Mposa: this prospect is located on the western shore of Lake Chilwa. Mposa is approximately 6 kilometres long and 300 metres wide.
- Bimbi: this prospect is located on the south-west shore of Lake Chilwa and has similar geology and grade characteristics to Mposa.
- Mpyupyu is situated to the south of Bimbi and consists of three separate mineralised zones.

Previous exploration work has been completed on the Chilwa Project, most recently in 2015, which included drilling, sampling, and metallurgical test work.

In 2016, AMC Consultants (UK) Limited ('AMC') prepared a mineral resource estimation ('MRE') for internal use by MEIML. During the process it was found that assaying had not been undertaken correctly by the assay laboratory and the effected samples had to be re-assayed. In 2021 AMC updated the MRE following receipt of the re-assayed sample date.

As at 31 July 2022 AMC defined a JORC (2012) Compliant Inferred Mineral Resource of 2.25 million tonnes ('Mt') total heavy minerals at 1%.

Following completion of the Offer, Chilwa intends to undertake an exploration program which will focus on increasing the size of the currently identified deposits and improving the confidence levels associated with the mineral resource estimation.

For further details on the Chilwa Project see section 3 of the Prospectus.

## 6. Economic analysis

Chilwa will be primarily exposed to the risks and opportunities of the Australian and Malawian markets through its operations and its listing on the ASX. As such, we have presented an economic analysis on the Australian economy and the Malawian economy.

### 6.1 Australia

#### Overview

In its March 2023 Monetary Policy Decision, the Reserve Bank of Australia ('RBA' or 'the Bank') stated that growth over the next couple of years is expected to be below trend, with household consumption growth slowing and the outlook for housing construction softening.

The rebound from the COVID-19 pandemic waned throughout 2022, contributing to a slowdown in the global economy. Like many advanced economies, high inflation and energy prices have weighed on demand in Australia. In addition, in 2023 and 2024, it is anticipated that GDP growth in Australia's key trading partners will remain substantially below historical norms. However, downside risks to growth in the major global economies have lessened in recent months helped by China's reversal of its COVID-19 measures in December 2022, which has diminished such risks and stabilised the supply chain recovery trajectory.

Inflation was 7.8% over the 2022 calendar year, the highest year-end inflation figure since 1990, and significantly higher than the RBA's inflation target of 2-3%. However, the RBA has stated that the monthly consumer price index indicator suggests that inflation has peaked in Australia, with goods price inflation expected to moderate over the months ahead. As a result, the central forecast is for inflation to decline over 2023 and 2024 before returning to the upper end of target levels by mid-2025.

The RBA has executed monthly cash rate rises at each of its meetings since May 2022, with the most recent rise in March 2023 taking the cash rate to 3.60%. The RBA anticipates further tightening of monetary policy will be needed to ensure that inflation returns to target and that this period of high inflation is only temporary.

The Bank's balance sheet remains large by historical standards, reflecting the monetary policy measures introduced in response to the COVID-19 pandemic. Since November 2022, the size of the balance sheet remains little changed at around \$626 billion. However, the Bank's balance sheet is expected to decline over the coming years as funding provided under the Term Funding Facility and the Bank's government bond holdings mature.

The labour market remains notably tight, with the unemployment rate around 3.5%, close to a 50 year low. Both job vacancies and job advertisements are at high levels but have fallen recently. Notwithstanding, many firms continue to express difficulty hiring workers, although some report an easing in labour shortages, as job vacancies have plateaued in recent months. As economic growth slows, the unemployment rate is expected to rise, reaching 4.5% by mid-2025.

Wage growth has accelerated, particularly in the private sector, in response to the tight labour market. As a result, wages growth is predicted to increase further over the course of 2023. The RBA remains alert to the risk of a prices-wages spiral, given the limited spare capacity in the economy and the historically low rate of unemployment, and will continue to pay close attention to both the evolution of labour costs and the price-setting behaviour of firms.

## Outlook

Economic growth in Australia is forecast to be hampered by rising interest rates, higher living costs and declining real wealth. As a result, the forecast declining trajectory of inflation in Australia remains uncertain and the high inflation environment is expected to continue weighing on real household incomes. The composition of inflation in Australia is also likely to shift, with higher inflation expected in more persistent and non-discretionary items, such as rent, in the coming years. However, despite inflationary concerns, aggregate household incomes have been sustained by solid labour demand, which has underpinned the health of household balance sheets. Although the balance of risks has improved in recent months, the pathway forward remains uncertain, with upside and downside scenarios equally plausible.

Exploration companies are not immune to the effects of inflation, with rising drilling and corporate costs impacting the level of capital required to fund exploration programs. Additionally, a tight labour market may make it more difficult for explorers to source labour and advance exploration.

Source: [www.rba.gov.au](http://www.rba.gov.au) Statement by Phillip Lowe, Governor: Monetary Policy Decision dated 7 March 2023 and prior periods and BDO analysis.

## 6.2 Malawi

### Overview

Malawi is a landlocked country in Southern Africa that shares its borders with Mozambique, Zambia, and Tanzania. The country has an estimated population of approximately 19.7 million people. The economy is heavily dependent on agriculture, which employs over 80% of the population. This reliance limits the country's growth potential and increases its susceptibility to weather shocks and food insecurity. Malawi is one of the least electrified countries in the world, with only 11% of the country having access to regular electricity. Internet access is also expensive and unreliable.

Malawi has had stable governments since independence in 1964, with multi-party presidential and parliamentary elections being held every five years since 1993. However, corruption remains a major challenge for firms operating in Malawi. A number of high-profile government scandals have occurred during all recent presidential administrations.

Malawi's economy was significantly impacted by the COVID-19 pandemic. While economic growth increased to 2.8% in 2021, it has remained below pre-pandemic levels. Dry spells at the beginning of the growing season decreased crop yields, and multiple tropical storms have damaged farmland and key infrastructure. External shocks and the war in Ukraine have contributed to the slow GDP growth. The outlook for 2023 remains subdued, with growth projected to decelerate to 2.2%.

In October 2022, headline inflation reached the highest levels since June 2013, standing at 26.7% year-on-year. Headline inflation fell slightly in December 2022 to 25.4% year-on-year, which is still well-above the Reserve Bank of Malawi's target range of 3% to 7%. Food inflation reached 31.3% in December 2022, largely due to an increase in maize prices. Non-food inflation increased to 18.6% in December 2022, with particularly large increases in the costs of transport and utilities driven by international price increases and the adjustment of the exchange rate.

Malawi's mining sector accounts for 1% of GDP. The government projects mining will grow by 5% in 2023. Malawi has several minerals with economic potential, including graphite, uranium, coal, limestone, bauxite, heavy mineral sands, alluvial gold mineralization and semi-precious stones. Several rare earth and niobium projects are planned, with anticipated start dates in the next two years. The mining sector in

Malawi falls under the Ministry of Mines, Energy and Natural Resources. The role of the ministry is to ensure sustainable development, management, and utilisation of natural resources; energy; and mineral resources for the socio-economic growth and development of Malawi.

### Outlook

Malawi's economic outlook remains uncertain. The economy will remain burdened with high inflation, exchange-rate instability and slow growth in 2023-24. Trade policies and an unpredictable business environment continue to impede investment and commercialization, as well as erratic electricity supply. Public investment has been low and of mixed quality. Weak fiscal management and economic policies have contributed to recurring and large fiscal deficits, mostly funded by high-cost domestic borrowing and resulting in a surge in public debt. Together with external shocks, economic management choices have compounded the acute balance of payments crisis, which needs addressing urgently for Malawi to realize its economic and development potential. Despite social instability, GDP growth is forecast to accelerate from 2024 if output from the mining and agriculture industries pick up and funding becomes accessible through the extended credit facility with the International Monetary Fund

*Source: The World Bank, US International Trade Administration, International Monetary Fund, US Department of State, The Economist Intelligence Unit.*

## 7. Industry analysis

Heavy-mineral sands ('HMS') are typically ancient beach, river or dune sands that contain dense minerals of economic value. These minerals include zircon, titanium products (rutile, ilmenite and leucoxene), and rare earth elements which are also known as 'heavy minerals' due to their heavy characteristic. Mineral sands are used for many purposes and can be found in a range of everyday household products, including electronics.

The shallow depth of mineral sands deposits allows mining to be conducted using conventional surface mining methods including bulldozers, excavators and trucks which minimises disturbance to the land. The topsoil, subsoil and clay are removed and stockpiled separately to allow it to be progressively returned in correct order after the mining process. Once the mineral sand ore is removed from the ground, water is added to the ore which is pumped to a processing plant where the valuable heavy minerals are separated from the sand. The sand is then pumped back to the mined area, the water is removed for reuse and the sand is returned to the ground. The subsoil and topsoil are then replaced and the land is rehabilitated back to its original land use.

### Zircon

Zircon is a colourless to off-white mineral primarily used in the ceramics industry as a speciality glaze and foundry medium. It is also used as a raw material for making foundry mouldings and bricks, and furnace linings due to its melting point of over 2500 degrees Celsius.

Zircon contains the metals zirconium and hafnium which are widely distributed in the Earth's crust and is often found in most igneous and metamorphic rocks. Zircon is extremely resistant to corrosion and has a high melting point, and as such, is used to make pipes for harsh chemicals, nuclear reactor cladding, line furnaces, heat exchangers and speciality alloys. In addition, Zircon products are also used in engines, electronics, spacecraft and the ceramics and tiles industry.

China, India and Spain are the leading global importers of Zircon. Over half of all zircon is used in the production of ceramic items including kitchen benches, tiles and bathroom fittings. Zircon is also used in a range of production processes in refractories and foundry casting. Growing markets include zirconium chemicals used in catalytic fuel converters, and air and water purification systems.

Zircon constitutes a relatively secure input source to a range of industrial and end-consumer applications, with relatively low threats from substitutes. Today, zircon is often a co-product at mining or processing operations where ilmenite and rutile are being mined for their titanium content.

Zircon prices increased in 2018, on the back of tight zircon supply. Prices then largely stabilised, before increasing again in 2022 amid strong global demand, supply shortages in South Africa and low inventory level in China. Consensus Economics forecasts the long-term price of zircon to be approximately US\$1,635/ tonne.

### Titanium dioxide

Titanium dioxide is mined as ilmenite, rutile, or other variants of titanium oxide. Its primary use is as a whitening pigment in paints, plastics and paper. Titanium dioxide is manufactured either by using sulfuric acid (sulphate process) or chlorine (chloride process).

### **Ilmenite**

Ilmenite is the most abundant titanium mineral which contains approximately 35% to 65% titanium dioxide. It is black and opaque, and known to be slightly magnetic with a specific gravity around 4.5 to 5.0. Ilmenite is predominantly used a direct feedstock for sulphate or chloride route titanium pigment plants. Prices are set under long-term contracts. Consensus Economics forecasts the long-term price of ilmenite to be approximately US\$260/tonne.

### **Rutile**

Rutile is composed of approximately 95% to 100 % titanium dioxide. The mineral is typically red to black in colour and has a specific gravity of 4.25. Rutile is predominantly used as direct feedstock for chloride route titanium pigment plants. Some rutile is also used in the manufacture of welding electrodes. Prices are set under long-term contracts between producers and consumers. Consensus Economics forecasts the long-term price of rutile to be approximately US \$1,411/tonne.

### **Leucoxene**

Leucoxene is not a pure mineral species but rather refers to a range of commercial titanium bearing products typically containing between 65% and 92% titanium dioxide. Leucoxene is predominantly used as direct feedstock for chloride route titanium pigment plants and in the manufacture of welding electrodes. Titanium pigment is the largest end use of titanium feed stocks, accounting for roughly 90% of demand, and is used in paints, plastics and paper. Titanium metal demand has been growing, with its high strength to weight ratio and high corrosive resistance ideal for aerospace, heat exchanges

### **Mineral Sands Outlook**

Mineral sand prices are forecast to continue trending upwards over the five years through 2026-27, supporting industry revenue growth. Although demand for mineral sands is projected to grow over the period, higher global rutile output (both naturally occurring and synthetic) is likely to limit price growth as increased supply puts downward pressure on prices. Similarly, increases in the global supply of ilmenite is likely to closely match demand growth over the period, limiting scope for higher prices. However, rising steel production in Asia, most notably in China, is projected to drive modest price gains for zircon over the period.

**Source:** Geoscience Australia *Zircon*, Minerals Council of Australia *Mineral Sands*, United States Geological Survey, IBIS World, Consensus Economics February 2023



## 8. Valuation approach adopted

As detailed in Sections 2 and 3 of our Report, in assessing whether the Proposed Issue is fair and reasonable to Security Holders, we have assessed the value of a Chilwa share as at the admission date (prior to the Performance Securities vesting) and compared it to the value of a Chilwa share following the achievement of the respective Performance Milestones and the resulting issue of ordinary shares on conversion of the Performance Securities.

### 8.1 Value of a Chilwa share as at the admission date

In our assessment of the value of a Chilwa share at the admission Date, we have chosen to employ a market-based assessment as our valuation methodology. The market approach involves determining the value of a Chilwa share by considering recent or prospective market sales and precedent transactions involving the sale of the Company's shares, commonly in the form of a placement or other capital raising.

A key factor in determining the appropriateness of using this methodology is whether the acquirer of the shares is an unrelated third party and whether the level of interest subscribed for in the company's equity is substantial enough to reflect the underlying value of the company. These factors need to fulfil the definition of an arm's length transaction between a willing buyer and willing seller for the shares in that company.

We consider that the offer of Chilwa' shares under the Prospectus will represent an arm's length transaction between a large number of willing buyers and a willing seller, in which the price subscribed for under the offer is a strong indicator of market value. On an undiluted basis, the number of shares intended to be subscribed for under the Offer equates to an interest of up to approximately 59.5%, which we consider to be substantial enough for it to reflect the fair value of the Company's shares. Therefore, we have determined that the offer price of \$0.20 per share is the best indicator of the fair value of a Chilwa share upon quotation on the ASX.

### 8.2 Value of a Chilwa share following the achievement of the Performance Milestones

As detailed in Section 4, the Performance Securities vest subject to certain criteria which we have summarised below:

Class	Performance Milestone
Class A	The Company announcing a JORC compliant Indicated Resource of 3 million tonnes THM from the Chilwa Project by no later than 24 months from the grant of the performance securities.
Class B	The Company announcing the completion of a Pre-Feasibility Study (as defined in the JORC Code) that recommends further proceeding with the Chilwa Project by no later than 48 months from the grant of the performance securities.
Class C	The Company announcing the completion of a Feasibility Study (as defined in the JORC Code) that recommends further proceeding with the Chilwa Project by no later than 48 months from the grant of the performance securities
Class D	The Company announcing that a decision to mine the Chilwa Project has been made by no later than 60 months from the grant of the performance securities.

ASX GN 19 states:

*“in determining their opinion on fairness and reasonableness, ASX would expect the independent expert to assume that the relevant performance milestone(s) have been met, assess the impact that would have on the value of the entity compared to the situation if the relevant performance milestone(s) were not met, and then determine whether the resulting number of ordinary shares to be issued by the entity to the holder of the performance shares is fair and reasonable in the circumstances.”*

Under RG 111.91, an expert’s opinion should be based on reasonable grounds, with the grounds being set out in the report. Similarly, RG 111.112 states that an expert should not include forward-looking information unless there are reasonable grounds for the forward-looking information.

We note that RG 170 ordinarily relates to prospective financial information, however RG 111.114 states that RG 170 provides useful guidance for the inclusion of forward-looking information that does not fall within the definition of ‘prospective financial information’. RG 170.17 states that the making of a forward-looking statement must have reasonable grounds or it will be taken to be misleading. This is further supported by IS 214 which applies the principles of RG 170 to forward-looking information in the mining and resources sector.

In order to compare the value of a Chilwa share prior to and following the achievement of the respective Performance Milestones, we must consider whether there are reasonable grounds to make forward-looking assumptions underpinning the future value of the Company. If there are sufficient reasonable grounds to do so, an assessment as to how the change in value of a Chilwa share compares to the value of the shares to be issued on vesting of the Performance Securities can be undertaken and hence an assessment of fairness can be derived. However, if there are insufficient reasonable grounds to make forward looking assumptions on value, we are unable to express an opinion on value and therefore, by default, the Proposed Issue would be considered to be not fair.

We have considered the terms of the Performance Securities and have determined that we have insufficient reasonable grounds, in accordance with RG 170, to quantify any uplift in value to Chilwa upon achievement of each of the Performance Milestones.

We note that while the achievement of the Performance Milestones would likely result in value accretion, we are unable to quantify the extent of the value uplift, nor the timing of achieving it (should it be achieved). Given that there are currently insufficient reasonable grounds on which to assess the quantum of any value uplift upon achieving the Performance Milestones, we are unable to conclude on fairness.

## 9. Are the terms of the Performance Securities Fair?

Having regard to the guidance set out in ASX GN 19, RG 111 and RG 170, our opinion in relation to whether the proposed terms of the Performance Securities are fair to Security Holders is set out below.

Performance Milestone	Performance Milestone details	Fairness Test	Description	Conclusion
Milestone 1	The Company announcing a JORC compliant Indicated Resource of 3 million tonnes THM from the Chilwa Project by no later than 24 months from the grant of the performance securities.	Unable to opine on future value of the Company	No reasonable grounds to make forward looking assumptions on the future value of the Company should the Milestone be achieved	Not Fair
Milestone 2	The Company announcing the completion of a Pre-Feasibility Study (as defined in the JORC Code) that recommends further proceeding with the Chilwa Project by no later than 48 months from the grant of the performance securities.	Unable to opine on future value of the Company	No reasonable grounds to make forward looking assumptions on the future value of the Company should the Milestone be achieved	Not Fair
Milestone 3	The Company announcing the completion of a Feasibility Study (as defined in the JORC Code) that recommends further proceeding with the Chilwa Project by no later than 48 months from the grant of the performance securities.	Unable to opine on future value of the Company	No reasonable grounds to make forward looking assumptions on the future value of the Company should the Milestone be achieved	Not Fair
Milestone 4	The Company announcing that a decision to mine the Chilwa Project has been made by no later than 60 months from the grant of the performance securities.	Unable to opine on future value of the Company	No reasonable grounds to make forward looking assumptions on the future value of the Company should the Milestone be achieved	Not Fair

As stated in Section 8, we have considered the terms of the Performance Securities and have determined that we have insufficient reasonable grounds, in accordance with RG170, to quantify any uplift in value to Chilwa on completion of each of the Performance Milestones.

We note that while the respective Performance Milestones may result in value accretion, we are unable to quantify the extent of the value uplift (if any), nor the timing of achieving it (should it be achieved). Given that there are currently insufficient reasonable grounds on which to assess the quantum of any value uplift associated with achieving the Performance Milestones, we are unable to assess fairness, and therefore conclude the issue of the Performance Securities is not fair to Security Holders.

## 10. Are the terms of the Performance Securities reasonable?

In assessing whether the Performance Securities are reasonable for Security Holders, we have considered the advantages and disadvantages associated with issuing the Performance Securities, the consequences of the Performance Securities not being on issue, the consequences of the Milestones being achieved, and the position of Security Holders should the Milestones not be achieved.

Giving consideration to each of the points set out below, we consider the Performance Securities to be reasonable.

### 10.1 Advantages of issuing the Performance Securities

We have considered the following advantages when assessing whether the terms of the Performance Securities are reasonable:

Advantage	Description
<p>The Performance Milestones are structured in such a way to align the interests of Security Holders and the holders of the Performance Securities</p>	<p>Performance securities are widely considered to be a method of remuneration that aligns the interests of the holder of the performance securities with the shareholders of a company. In particular, the Performance Milestones are all linked to various milestones in the development of the Chilwa Project, from the completion of a Feasibility Study to a final investment decision to mine the Chilwa Project, therefore aligning the interests of the holders and Security Holders.</p> <p>However, whilst the achievement of the Performance Milestones may be value accretive, as outlined in Section 9 of our Report, it will depend on (a) the nature and extent of funding required in order to progress the Chilwa Project to each of the stages of development as per the Performance Milestones and (b) the extent of any value uplift.</p> <p>Therefore, the Performance Securities are structured in a way to align the interests of Security Holders and the holder of the Performance Securities.</p>
<p>The Performance Securities are being issued to the Vendor as consideration for the acquisition of the Chilwa Project. As the consideration is non-cash, it allows Chilwa to preserve the cash raised under the Offer to progress the Chilwa Project</p>	<p>The consideration for the acquisition of the Chilwa Project is predominantly in the form of equity. Therefore, Chilwa will not be required to redirect funds raised under the Offer to achieve its exploration plans.</p>
<p>By issuing the Performance Securities to the MD, Non-Executive Chairman and management, it allows the Company to retain its people and to preserve cash raised under the Offer for progressing its Chilwa Project</p>	<p>The Performance Securities are being issued to Mr. Buss in his capacity as MD, Mr. Lucas in his capacity as Non-Executive Chairman and management of the Company. By remunerating the Company's personnel via the issue of Performance Securities, this allows the Company to retain its people which may provide the</p>

Advantage	Description
	<p>Company with a greater chance of delivering value to Security Holders.</p> <p>As detailed in the Prospectus, the Company has allocated approximately \$4.50 million of the gross funds raised under the Offer to the initial exploration program at the Chilwa Project. If the Performance Securities are not issued, it is likely that a greater portion of the funds raised under the Offer would be spent on corporate costs. Therefore, the issue of Performance Securities to the MD, Non-Executive Chairman and management as incentive payments will enable the Company to preserve cash raised under the Offer which can be used to progress its Chilwa Project. As the vesting relates to events that are likely to occur over an extended period of time this may provide stability of the leadership team through the development of the Chilwa Project.</p>
<p>Issue of the Performance Securities to the Vendor results in exposure to a potentially economically viable project</p>	<p>Given that the Performance Securities are a component of the consideration payable under the acquisition of the Chilwa Project, Chilwa may not be able to acquire the Chilwa Project and continue with viable exploration plans unless further funds are raised under the Offer. These further funds would result in dilution at IPO. The current deferred consideration structure exposes shareholders to a potentially economical project that will only result in dilution on value accretive events.</p>
<p>The Performance Securities to be issued to the directors and management will result in minimal dilution to shareholders if vested</p>	<p>The number of Performance Securities that are proposed to be issued to directors and management will provide only minimal dilution to Security Holders. Assuming all the Performance Securities vest, the Performance Securities issued to directors and management will result in a dilution to existing Security Holders' holdings of 6.78%.</p>

## 10.2 Disadvantages of issuing the Performance Securities

We have considered the following disadvantages when assessing whether the terms of the Performance Securities are reasonable:

Disadvantage	Description
<p>Potential dilution of Security Holders' interests if the Performance Milestones are met and the Performance Securities vest and ordinary shares are issued</p>	<p>The impact of issuing the Performance Securities is that if the Performance Milestones are met, Security Holders' interests in the Company will be diluted. As detailed in Section 4 of our Report, the Performance Securities (if vested) will represent 27.11% of the Company's issued capital, therefore if all Performance Securities are converted to shares, existing Security Holders' interests will be</p>

Disadvantage	Description
	<p>diluted from holding 69.20% to 50.98% of the Company's issued capital. As detailed in Section 9 of our Report, we note that despite Security Holders' interests decreasing following the vesting of the Performance Securities, it is likely that the value of their interest will increase.</p> <p>We also note that in the scenario where only Milestones 2 and 3 are achieved, it is possible for Security Holders' interests to be diluted without any corresponding value accretion. For example, it is possible for Milestones 2 and 3 to be achieved (completion of a Feasibility Study), even if the Company is unable to receive necessary funding to progress the Chilwa Project to a final investment decision. In this scenario, the Milestone 2 and 3 Performance Securities will vest and convert into ordinary shares of Chilwa despite the Chilwa Project not proceeding to production and therefore the Feasibility Study alone would not provide Security Holders' any benefit, however, Security Holders would still experience dilution.</p> <p>Furthermore, we note that following the vesting of the Performance Securities, no individual holder of Performance Securities will obtain control, therefore there is no change of control implications associated with the vesting of the Performance Securities.</p>
<p>The terms of the Performance Securities are not fair. Despite being not fair, the achievement of the Performance Milestones may be value accretive.</p>	<p>We have concluded that the terms of the Performance Securities are not fair. However, the basis for this opinion is that we do not currently have sufficient reasonable grounds to make assumptions regarding (a) how the achievement of the Performance Milestones will be funded, or (b) the extent of the value uplift, if any. If it will be funded entirely by debt and/or existing cash reserves and there is value uplift in the Chilwa Project, then in theory, the achievement of the Performance Milestones may be value accretive to Security Holders. However, if it is entirely or partly funded by equity, then any value generated will need to be shared between Security Holders, holders of the Performance Securities and new shareholders. The proportion of the value to be split between these three parties is unknown, therefore we are unable to conclude that the vesting of the Performance Securities are value accretive to Security Holders.</p>

### 10.3 Consequences of the Performance Securities not being issued

The Performance Securities are being issued to the Vendor as consideration for the acquisition of the Chilwa Project as well as to the Company's MD, Non-Executive Chairman and management.

The acquisition of the Chilwa Project is subject to the satisfaction of several conditions, including the satisfaction of all the conditions associated with the quotation of its securities on the ASX. Therefore, in the event that the Performance Securities are not issued, the Company will not be able to proceed with the acquisition and instead will need to renegotiate the terms of the acquisition in order to remove performance securities from the consideration structure.

In addition, if the Performance Securities to be issued as remuneration are not issued, it is likely that the Company would need to remunerate the MD, Non-Executive Chairman and management via alternate means. Alternatives available to the Company could be to replace the issue of Performance Securities with shares, options or cash, which are considered further in the table below.

Form of remuneration	Potential consequences to Security Holders
Shares	<p>Shares would align the interests of Directors and key management personnel with Security Holders, however these would be immediately dilutive to Security Holders' interests. Further, by issuing shares the Company does not ensure that its key people are retained for a minimum term as Directors and key management personnel would not be prohibited from leaving the business and selling their shares.</p> <p>There is also a possibility that the risk tolerance of the directors and management do not align with Security Holders as the holders are being issued the shares at nil cost.</p>
Options	<p>Options are an effective way of aligning the interests of Directors and key management personnel with Security Holders as options only have value to the holder when at some point over the life of the option, the underlying share value exceeds the exercise price. Therefore, Directors and key management personnel are incentivised to create value for other shareholders. An added benefit of an option is that when exercised, it provides cash for the Company.</p> <p>However, a characteristic of an option is that it has no downside risk. Therefore, in the event that the options are significantly out-of-the-money, there is a possibility that the risk tolerance of the directors and management may not be consistent with those of Security Holders.</p>
Cash	<p>If additional remuneration was paid to the directors and management via fees or higher salaries, then the benefit would be that Security Holders' interest in the Company would not be diluted. However, a cash payment means that the directors and management will not have the additional incentive to create value for Security Holders.</p> <p>Further, additional cash remuneration would have meant that less cash could be invested in the Chilwa Project, which may limit the ability of the Company to generate value for Security Holders. Alternatively, additional funds may need to be raised, which would dilute Security Holders' interests (assuming they do not participate in the additional raising).</p>

We note that if the Performance Milestones are not achieved, assuming no other share issued, Security Holders collectively will continue to hold the same interest in the Company.

## 10.4 Consequences of the Performance Milestones being achieved

In the event that the Performance Milestones are achieved, assuming that no additional equity funding is required, then Security Holders collectively will have their interests diluted as outlined previously in Section 10.2 of this Report.

## 10.5 Other Considerations

### Consequences of not vesting

Should the Performance Milestones not be met within the respective vesting periods, the Performance Securities will not vest and there will be no dilution of prospective and non-participating Security Holders' interests.

The Performance Securities that are being issued to Luso will only convert to shares in the circumstance that Luso either does not increase its voting power or does so using the "3% creep".

We note that the performance securities that are being issued to Luso will vest upon milestones being reached, however they will only convert to shares in circumstances that Luso either does not increase its voting power or does so using the "3% creep" exception to the prohibition in the Corporations Act to a person increasing their voting power over 20%.

### Remuneration Package Benchmarking (Performance Securities to be issued to Directors and management of Chilwa)

As an additional consideration to assist Security Holders in making a decision, we have considered how the remuneration packages for Mr. Buss (MD) and Mr. Lucas (Non-Executive Chairman) compare to remuneration packages of directors and executives of comparable companies in the energy and resources sector. To undertake this assessment, we have consulted the BDO REM Specialist for the provision of industry data and input. Our assessment is based on the future remuneration over the period that the Performance Securities may vest and has not considered historical payments.

Based on the proposed remuneration for the year ending 2023, the total remuneration packages for Mr. Buss and Mr. Lucas is outlined as follows:

Name	Position	Total Fixed Remuneration* \$	Incentive opportunity** \$
Cadell Buss	Managing Director	300,000	880,000
Philip Lucas	Non-Executive Chairman	80,000	270,000

\*Excluding superannuation

\*\*Assuming all Performance Securities vest and convert into shares with a value of \$0.20 per share based on the Offer Price

Source: Prospectus and BDO analysis

We note that the Performance Milestones attached to the incentive opportunities (being the Performance Securities) are assessable over a maximum five-year period (based on Milestone 4). Therefore, on a pro rata basis, this is equivalent to \$176,000 and \$54,000 of incentive opportunity per year for Mr. Buss and Mr. Lucas respectively.

Therefore, the total remuneration opportunity for Mr. Buss and Mr. Lucas is summarised as follows:

Element	Cadell Buss	Philip Lucas
Total Fixed Remuneration (inclusive of 10.50% superannuation)*	\$331,500	\$88,400
Total Incentive Opportunity	\$176,000	\$54,000
<b>Total Remuneration Opportunity</b>	<b>\$507,500</b>	<b>\$142,400</b>

\*Calculated based on the total fixed remuneration plus superannuation of 10.50%

Source: BDO analysis



We have been advised by the BDO REM Specialist that based on its internal Board and Executive Remuneration Database, which consists of ASX-listed companies in the mining and metals sector (market capitalisations between \$15 million and \$45 million), would represent the following remuneration package quartiles:

#### MD Benchmarking

Element	25th percentile	50th percentile	75th percentile
Total Fixed Remuneration (inclusive of 10.50% superannuation)	\$181,000	\$284,000	\$376,000
Total Incentive Opportunity	\$63,000	\$156,000	\$244,000
<b>Total Remuneration Opportunity</b>	<b>\$244,000</b>	<b>\$440,000</b>	<b>\$620,000</b>

Source: Advice provided by BDO REM Specialist

The BDO REM Specialist has also advised that the annual incentive opportunity for MDs at this market band would represent a range from 35% to 65% of the total fixed remuneration package.

Based on the above, we note that both the fixed remuneration and incentive opportunity elements of Mr. Buss' remuneration package are higher than the market median of \$284,000 and \$156,000 respectively but within observed bands.

However, we note that Mr. Buss has extensive industry knowledge and experience with African based mineral assets. In addition, we understand that Mr. Buss would likely travel relatively frequently to Malawi. The BDO REM Specialist has advised that it would be reasonable to be compensated for this hardship.

#### Non-Executive Chairman Benchmarking

Element	25th percentile	50th percentile	75th percentile
Total Fixed Remuneration (inclusive of 10.50% superannuation)	\$46,000	\$67,000	\$89,000
Total Incentive Opportunity	\$9,000	\$23,000	\$55,000
<b>Total Remuneration Opportunity</b>	<b>\$55,000</b>	<b>\$90,000</b>	<b>\$144,000</b>

Source: Advice provided by BDO REM Specialist

The BDO REM Specialist has also advised that the annual incentive opportunity for Non-Executive Chairmen at this market band would represent a range from 20% to 62% of the total fixed remuneration package.

Based on the above, we note that both the fixed remuneration and incentive opportunity elements of Mr. Lucas' remuneration package are higher than the market median of \$67,000 and \$23,000 respectively. However, we note that Mr. Lucas' remuneration package is below the 75<sup>th</sup> percentile and given his extensive experience, we do not consider this to be unreasonable.

Therefore, we consider that the remuneration packages for the Mr. Buss and Mr. Lucas are reasonable on the basis that they fall within a reasonable range of the industry remuneration data for companies similar to Chilwa, as provided by the BDO REM Specialist.

We understand that on Admission to the ASX, the MD and Non-Executive Chairman will be paid for services provided over the year in their role as MD and Non-Executive Chairman, that they had not yet been paid for. We have not included the payment of these fees as part of the remuneration packages for Mr. Buss (MD) and Mr. Lucas (Non-Executive Chairman), as they relate to fees incurred historically.

We also note that the Board proposes issue 500,000 Performance Securities to other management to remunerate, incentivise and retain personnel, which we consider to be reasonable. We note that once listed Shareholders will be required to vote on the remuneration report and the issue of future securities to Directors.

## 11. Conclusion

We have considered the terms of the Performance Securities as outlined in the body of our Report and have concluded that the proposed issue of the Performance Securities is not fair but reasonable to Security Holders.

In our opinion, the proposed issue of the Performance Securities is not fair because we are unable to opine on the impact on the value of a Chilwa share should the Performance Milestones be achieved. This is because we do not have reasonable grounds to make forward looking assumptions that would be required to quantify the value of a Chilwa share following the achievement of the Performance Milestones. Therefore, by default, we consider the issue of the Performance Securities to be not fair.

However, we do consider the issue of the Performance Securities to be reasonable because the advantages are greater than the disadvantages. In particular, we consider it likely that the achievement of the Performance Milestones will be value accretive to Security Holders.

Furthermore, we have undertaken an assessment on how the total value of shares that will vest to the MD and Non-Executive Chairman, assuming all Performance Milestones are met, together with their fixed salaries, compares to remuneration packages of directors and executives of comparable companies in the energy and resources industries. Based on our assessment and advice provided by our BDO REM Specialist, we consider the remuneration packages of the MD and Non-Executive Chairman to be reasonable.

## 12. Sources of information

This report has been based on the following information:

- Draft Chilwa Prospectus;
- Terms of the Performance Securities;
- AMC Independent Geologist's Report;
- Share registry information;
- Information in the public domain; and
- Discussions with Directors and Management of Chilwa.

## 13. Independence

BDO Corporate Finance (WA) Pty Ltd is entitled to receive a fee of \$30,000 (excluding GST and reimbursement of out-of-pocket expenses). The fee is not contingent on the conclusion, content or future use of this Report. Except for this fee, BDO Corporate Finance (WA) Pty Ltd has not received and will not receive any pecuniary or other benefit whether direct or indirect in connection with the preparation of this report.

BDO Corporate Finance (WA) Pty Ltd has been indemnified by Chilwa in respect of any claim arising from BDO Corporate Finance (WA) Pty Ltd's reliance on information provided by the Company, including the non-provision of material information, in relation to the preparation of this report.

Prior to accepting this engagement BDO Corporate Finance (WA) Pty Ltd has considered its independence with respect to Chilwa and any of their respective associates with reference to ASIC Regulatory Guide 112 'Independence of Experts'. In BDO Corporate Finance (WA) Pty Ltd's opinion it is independent of Chilwa and its respective associates.

Neither the two signatories to this report nor BDO Corporate Finance (WA) Pty Ltd, have had within the past two years any professional relationship with Chilwa, or their associates, other than in connection with the preparation of this report.

A draft of this report was provided to Chilwa and its advisors for confirmation of the factual accuracy of its contents. No significant changes were made to this report as a result of this review.

BDO is the brand name for the BDO International network and for each of the BDO Member firms.

BDO (Australia) Ltd, an Australian company limited by guarantee, is a member of BDO International Limited, a UK company limited by guarantee, and forms part of the international BDO network of Independent Member Firms. BDO in Australia, is a national association of separate entities (each of which has appointed BDO (Australia) Limited ACN 050 110 275 to represent it in BDO International).

## 14. Qualifications

BDO Corporate Finance (WA) Pty Ltd has extensive experience in the provision of corporate finance advice, particularly in respect of takeovers, mergers and acquisitions.

BDO Corporate Finance (WA) Pty Ltd holds an Australian Financial Services Licence issued by the Australian Securities and Investments Commission for giving expert reports pursuant to the Listing rules of the ASX and the Corporations Act.

The persons specifically involved in preparing and reviewing this report were Sherif Andrawes and Adam Myers of BDO Corporate Finance (WA) Pty Ltd. They have significant experience in the preparation of independent expert reports, valuations and mergers and acquisitions advice across a wide range of industries in Australia and were supported by other BDO staff.

Sherif Andrawes is a Fellow of the Institute of Chartered Accountants in England & Wales and a Fellow of Chartered Accountants Australia & New Zealand. He has over 35 years' experience working in the audit and corporate finance fields with BDO and its predecessor firms in London and Perth. He has been responsible for over 500 public company independent expert's reports under the Corporations Act or ASX Listing Rules and is a CA BV Specialist. These experts' reports cover a wide range of industries in Australia with a focus on companies in the natural resources sector. Sherif Andrawes is the Corporate Finance Practice Group Leader of BDO in Western Australia, the Global Head of Natural Resources for BDO and a former Chairman of BDO in Western Australia.

Adam Myers is a member of Chartered Accountants Australia & New Zealand and the Joint Ore Reserves Committee. Adam's career spans over 25 years in the audit and corporate finance areas. Adam is a CA BV Specialist and has considerable experience in the preparation of independent expert reports and valuations in general for companies in a wide number of industry sectors.

Allan Feinberg is a thought leader in remuneration, is a published writer, and is co-author of the Remuneration and Reward Series. He has worked across many organisations and sectors that include mining and metals, construction and engineering and utilities. Previously, Allan was the founder and Managing Director of AUSREM, a boutique remuneration consulting practice that was acquired by Mercer,

the Business Leader for Mercer's Resources and Energy Practice for the Pacific Region, and State Manager for Hay Group Western Australia.

## 15. Disclaimers and consents

This report has been prepared at the request of Chilwa for inclusion in the Prospectus. Chilwa engaged BDO Corporate Finance (WA) Pty Ltd to prepare an independent expert's report to consider whether the proposed issue of Performance Securities, is fair and reasonable to the non-participating Security Holders of Chilwa.

BDO Corporate Finance (WA) Pty Ltd hereby consents to this report accompanying the above Prospectus. Apart from such use, neither the whole nor any part of this report, nor any reference thereto may be included in or with, or attached to any document, circular resolution, statement or letter without the prior written consent of BDO Corporate Finance (WA) Pty Ltd.

BDO Corporate Finance (WA) Pty Ltd takes no responsibility for the contents of the Prospectus than this report.

We have no reason to believe that any of the information or explanations supplied to us are false or that material information has been withheld. It is not the role of BDO Corporate Finance (WA) Pty Ltd acting as an independent expert to perform any due diligence procedures on behalf of the Company. The Directors of the Company are responsible for conducting appropriate due diligence in relation to Chilwa. BDO Corporate Finance (WA) Pty Ltd provides no warranty as to the adequacy, effectiveness or completeness of the due diligence process.

The opinion of BDO Corporate Finance (WA) Pty Ltd is based on the market, economic and other conditions prevailing at the date of this report. Such conditions can change significantly over short periods of time.

With respect to taxation implications it is recommended that individual Security Holders obtain their own taxation advice, in respect of the Offer and the Proposed Issue, tailored to their own particular circumstances. Furthermore, the advice provided in this report does not constitute legal or taxation advice to the Security Holders of Chilwa, or any other party.

The statements and opinions included in this report are given in good faith and in the belief that they are not false, misleading or incomplete.

The terms of this engagement are such that BDO Corporate Finance (WA) Pty Ltd is required to provide a supplementary report if we become aware of a significant change affecting the information in this report arising between the date of this report and prior to the date of the meeting or during the offer period.

Yours faithfully

**BDO CORPORATE FINANCE (WA) PTY LTD**



**Adam Myers**  
Director



**Sherif Andrawes**  
Director

# Appendix 1 - Glossary of Terms

Reference	Definition
The Act	The Corporations Act 2001 Cth
AMC	AMC Consultants (UK) Limited
APES 225	Accounting Professional & Ethical Standards Board professional standard APES 225 'Valuation Services'
ASIC	Australian Securities and Investments Commission
ASX	Australian Securities Exchange
BDO	BDO Corporate Finance (WA) Pty Ltd
BDO Rem Specialist	BDO's remuneration specialist, Allan Feinberg, who provided advice in relation to the remuneration packages of the MD and executive chairman for the purposes of Our Report.
Chilwa	Chilwa Minerals Limited
Chilwa Project	The Chilwa Heavy Metals Minerals Sands located in Malawi
The Company	Chilwa Minerals Limited
CM Africa	Chilwa Minerals Africa Limited
GN19	Australian Securities Exchange Guidance Note 19 <i>Performance Securities</i>
HMS	Heavy Mineral Sands
IS 214	Information Sheet 214: <i>Mining and Resources: Forward-looking Statements</i>
JORC Code	The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (2012 Edition)
km <sup>2</sup>	Square Kilometres
Luso	Luso Global Mining BV
MD	The Managing Director of Chilwa
MEIML	Mota-Engil Investments (Malawi) Limited

Reference	Definition
Milestone 1	The Company announcing a JORC compliant Indicated Resource of 3 million tonnes total heavy mineral from the Chilwa Project by no later than 24 months from the grant of the performance securities.
Milestone 2	The Company announcing the completion of a Feasibility Study (as defined in the JORC Code) that recommends further proceeding with the Chilwa Project by no later than 48 months from the grant of the performance securities.
Milestone 3	The Company announcing the completion of a Feasibility Study (as defined in the JORC Code) that recommends further proceeding with the Chilwa Project by no later than 48 months from the grant of the performance securities.
Milestone 4	The Company announcing that a decision to mine the Chilwa Project has been made by no later than 60 months from the grant of the performance securities.
MRE	Mineral Resource Estimation
Mt	Million Tonnes
The Offer	The Chilwa Prospectus will offer 40,000,000 shares at an issue price of \$0.20 per share to raise up to \$8,000,000 before costs
Proposed Issue	The proposed issue of 25 million performance securities to the vendor of the Chilwa Heavy Mineral Sands Project, directors and management of Chilwa.
Performance Milestones	The performance milestones attached to each class of the performance securities
Performance Securities	The 25 million performance securities that are proposed to be issued to the vendors of the Chilwa heavy mineral sands project, directors and management of Chilwa.
RBA	Reserve Bank of Australia
Regulations	Corporations Act Regulations 2001 (Cth)
Our Report	This Independent Expert's Report prepared by BDO
RG 111	Content of expert reports (March 2011)
RG 112	Independence of experts (March 2011)
Security Holders	The prospective and non-participating security holders of Chilwa
THM	Total Heavy Mineral
Transaction Document	The Prospectus for Chilwa Minerals Limited

Reference	Definition
The Vendor	Mota-Engil Investments (Malawi) Limited

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For permission requests, write to BDO Corporate Finance (WA) Pty Ltd, at the address below:

The Directors  
BDO Corporate Finance (WA) Pty Ltd  
Level 9, Mia Yellagonga Tower 2  
5 Spring Street  
Perth, WA 6000  
Australia

## Appendix 2 - Valuation Methodologies

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Methodologies commonly used for valuing assets and businesses are as follows:

### 1 *Net asset value ('NAV')*

Asset based methods estimate the market value of an entity's securities based on the realisable value of its identifiable net assets. Asset based methods include:

- Orderly realisation of assets method
- Liquidation of assets method
- Net assets on a going concern method

The orderly realisation of assets method estimates fair market value by determining the amount that would be distributed to entity holders, after payment of all liabilities including realisation costs and taxation charges that arise, assuming the entity is wound up in an orderly manner.

The liquidation method is similar to the orderly realisation of assets method except the liquidation method assumes the assets are sold in a shorter time frame. Since wind up or liquidation of the entity may not be contemplated, these methods in their strictest form may not be appropriate. The net assets on a going concern method estimates the market values of the net assets of an entity but does not take into account any realisation costs.

Net assets on a going concern basis are usually appropriate where the majority of assets consist of cash, passive investments or projects with a limited life. All assets and liabilities of the entity are valued at market value under this alternative and this combined market value forms the basis for the entity's valuation.

Often the FME and DCF methodologies are used in valuing assets forming part of the overall Net assets on a going concern basis. This is particularly so for exploration and mining companies where investments are in finite life producing assets or prospective exploration areas.

These asset based methods ignore the possibility that the entity's value could exceed the realisable value of its assets as they do not recognise the value of intangible assets such as management, intellectual property and goodwill. Asset based methods are appropriate when an entity is not making an adequate return on its assets, a significant proportion of the entity's assets are liquid or for asset holding companies.

### 2 *Quoted Market Price Basis ('QMP')*

A valuation approach that can be used in conjunction with (or as a replacement for) other valuation methods is the quoted market price of listed securities. Where there is a ready market for securities such as the ASX, through which shares are traded, recent prices at which shares are bought and sold can be taken as the market value per share. Such market value includes all factors and influences that impact upon the ASX. The use of ASX pricing is more relevant where a security displays regular high volume trading, creating a liquid and active market in that security.

### 3 *Capitalisation of future maintainable earnings ('FME')*

This method places a value on the business by estimating the likely FME, capitalised at an appropriate rate which reflects business outlook, business risk, investor expectations, future growth prospects and other entity specific factors. This approach relies on the availability and analysis of comparable market data.



The FME approach is the most commonly applied valuation technique and is particularly applicable to profitable businesses with relatively steady growth histories and forecasts, regular capital expenditure requirements and non-finite lives.

The FME used in the valuation can be based on net profit after tax or alternatives to this such as earnings before interest and tax ('EBIT') or earnings before interest, tax, depreciation and amortisation ('EBITDA'). The capitalisation rate or 'earnings multiple' is adjusted to reflect which base is being used for FME.

#### **4 *Discounted future cash flows ('DCF')***

The DCF methodology is based on the generally accepted theory that the value of an asset or business depends on its future net cash flows, discounted to their present value at an appropriate discount rate (often called the weighted average cost of capital). This discount rate represents an opportunity cost of capital reflecting the expected rate of return which investors can obtain from investments having equivalent risks.

Considerable judgement is required to estimate the future cash flows which must be able to be reliably estimated for a sufficiently long period to make this valuation methodology appropriate.

A terminal value for the asset or business is calculated at the end of the future cash flow period and this is also discounted to its present value using the appropriate discount rate.

DCF valuations are particularly applicable to businesses with limited lives, experiencing growth, that are in a start up phase, or experience irregular cash flows.

#### **5 *Market Based Assessment***

The market based approach seeks to arrive at a value for a business by reference to comparable transactions involving the sale of similar businesses. This is based on the premise that companies with similar characteristics, such as operating in similar industries, command similar values. In performing this analysis it is important to acknowledge the differences between the comparable companies being analysed and the company that is being valued and then to reflect these differences in the valuation.

## **ANNEXURE D - SOLICITOR'S REPORT**



27<sup>th</sup> March 2023

Our ref: 23/1/46/CJB

The Directors,  
Chilwa Minerals Limited,  
Level 9, 200 St Georges Terrace,  
Perth, Western Australia 6000,  
**AUSTRALIA**

Dear Directors

## **SOLICITOR'S REPORT ON MINING TENEMENTS**

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### **1 INTRODUCTION**

- 1.1 This report ("**Report**") is prepared for inclusion in a prospectus in respect of a listing on the Australian Securities Exchange ("**Proposed Prospectus**") to be issued by Chilwa Minerals Limited (ACN 656 965 589) ("**Company**") for an offer of 40,000,000 Shares in the capital of the Company, at an issue price of AU\$0.20 per Share to raise AU\$8,000,000 ("**IPO**").
- 1.2 This Report relates to a right granted to Mota-Engil Investments (Malawi) Limited (a Company incorporated in Malawi with Company Registration Number 11163) ("**Mota-Engil Investments**") to explore for heavy mineral sands in Malawi pursuant to the two (2) exploration licenses, Number EL0670/22 and Number EL0671/22, summarised in Schedule 1 to this Report and reproduced in Schedules 1 (a) and 1(b) to this Report respectively ("**Tenements**"). Unless stated otherwise, reference to a Tenement in this Report is a reference to a Tenement held by Mota-Engil Investments as further detailed in Schedule 1 and Schedules 1 (a) and 1(b) as applicable. The Tenements have been granted pursuant to the Mines and Minerals Act No. 8 of 2019 (Cap 61:01 of the Laws of Malawi) ("**Mining Act**"). This Report relates to the Tenements.
- 1.3 The Company has informed us that it intends to enter into a share sale agreement ("**SPA**") with Mota-Engil Investments and Luso Global Mining B.V. (Chamber of Commerce for Amsterdam Registration Number 51188872) ("**Luso**") pursuant to which:
- (1) Mota-Engil Investments agrees to incorporate a private company under the Companies Act (Cap 46:03 of the Laws of Malawi) ("**CA**") as a special purpose vehicle ("**SPV**");
  - (2) subject to compliance with various provisions of the Mining Act, the most notable of which are highlighted in section 6 of this Report, Transfer the Tenements to the SPV; and
  - (3) the Company will acquire 100% of the shares of the SPV which will result in the indirect acquisition of the Tenement subject to:
    - (a) compliance with the conditions precedent set out in the SPA. Schedule 2 to this Report contains a summary of some of the material terms of the SPA;



- (b) compliance with provisions of the Mining Act, the most notable of which are highlighted in section 6.4 (2)(g) of this Report; and
- (c) compliance with provisions of the Exchange Control Act (Cap 45:01 of the Laws of Malawi), the most notable of which are highlighted in section 6.7 of this Report.

- 1.4 The Malawi Mines and Minerals Registry is overseen by the Registrar of Mineral Tenements (“**Registrar**”). All endorsements and conditions affecting tenements are registrable at the registry.
- 1.5 Schedule 3 to this Report contains a proposed work program for exploration on the Tenements as provided to us by the Company (“**Proposed Work Program**”).
- 1.6 This Report also reviews the relevant law relating to the Tenements, as set out in section 6 of this Report. All Schedules to this Report form a part of this Report.

## 2 **SEARCHES**

2.1 For the purpose of this Report, we have conducted the following searches:

- (1) A search on Mota-Engil Investments’ record at the Malawi Companies Registry under the CA as at 31 May 2022;
- (2) A search of the Tenements in the register maintained by the Mines and Minerals Registry under the Mining Act as at 12 October 2022 (“**Mining Search**”); and
- (3) Searches on Mota-Engil Investments’ record at the High Court Registries in Blantyre (as at 29 July 2022), Lilongwe (as at 29 July 2022), Mzuzu (as at 22 July 2022) and Zomba (as at 29 July 2022) in Malawi (see also paragraph 11 below); and

together, the (“**Searches**”).

## 3 **OPINION**

3.1 On the basis of the Mining Search, but subject to the assumptions, qualifications and statements set out in this Report, we consider, as at the dates of the Mining Search described in section 2 above, that this Report provides an accurate statement as to:

- (1) (**Mota-Engil Investments’ interest**): Mota-Engil Investments’ interests in the Tenements;
- (2) (**Good standing**): the validity and good standing of the Tenements; and
- (3) (**Rights**): the rights and obligations of the holder of the Tenements, including carrying out the Proposed Work Program as set in Schedule 3 to this Report.

3.2 We express no opinion as to whether:

- (1) Mota-Engil Investments has, to-date, complied with the conditions of grant of the Tenements, or any obligations under the Mining Act, applicable environmental laws or other laws;
- (2) the conditions precedent under the SPA will be fulfilled;
- (3) any future applications for renewal of the Tenements will be granted;



- (4) adequate expenditure to meet any expenditure requirements under the Mining Act and/or the Tenements or activities to meet any program of work requirements under the Mining Act and/or the Tenements, have been made/performed in connection with the Tenements;

This Report, and the opinion in this Report, is given on the basis of the relevant laws of Malawi which we have identified in this report as currently in force on the date of this Report and we do not express any opinion in respect of any matter governed by or construed in accordance with the laws of Australia or any state thereof or the laws of any jurisdiction other than Malawi. .

#### 4 **ASSUMPTIONS AND QUALIFICATIONS**

In preparing this Report:

- (1) we have assumed the results of the Searches we have made, referred in section 2 of this Report, are accurate, complete and up-to-date;
- (2) we have relied on the accuracy of the registers, records and databases maintained by the Governmental bodies referred to in section 2.1 of the Report;
- (3) we have not conducted or obtained any searches other than those referred to in section 2 of this Report;
- (4) we have assumed that all contracts, agreements or arrangements we reviewed were within the capacity and powers of, and were validly authorised, executed and delivered by and binding on, each party to them and, where applicable, duly stamped;
- (5) we note that the status of the Tenements from the date of the Mining Search (including the good standing of the Tenements as applicable) is subject to compliance with the terms and conditions of the relevant legislation by the holder of the Tenements and any applicable agreements, and that such compliance is not determinable from the Mining Search;
- (6) where compliance with the requirements necessary to maintain the Tenements in good standing are not disclosed on the Mining Search, we express no opinion on such compliance;
- (7) we have assumed the accuracy and completeness of any instructions, documents and information given to us by the Company or any of its officers, employees, advisers, agents or representatives;
- (8) we have assumed that the responses to any questions which we have put to the directors, officers, employees, advisers and agents of the Company are true and accurate in all respects and did not contain any material omissions;
- (9) we have assumed that any responses provided by Mota-Engil Investments' directors, officers, employees, advisers and agents to any questions asked by or on behalf of the Company are true and accurate in all respects and have not contained any material omissions;
- (10) we have assumed that there were no documents other than those which were disclosed to us which relate or are relevant to the issues we examined;
- (11) we have assumed that all material matters (including contracts and other documents) have been:



- (a) advised or provided to us by the directors, officers, employees, advisers, agents and representatives of the Company in response to our inquiries; and
- (b) provided by Mota-Engil Investments to the Company;
- (12) we have assumed that no terms of any of the contracts, agreements or the Tenements we reviewed have been breached or are currently in breach;
- (13) if any complaints or objections have been lodged against the Tenements (including the applications for any Tenements), we make no comment on the likelihood of success of such complaints or objections;
- (14) we have assumed that all the provisions of the Mining Act and any terms and conditions in the Tenements and/or relating to the Tenements have been complied with;
- (15) references in Schedule 1 to any area of land are taken from the exploration licenses attached as Schedules 1(a) and 1 (b) respectively. It is not possible to verify the accuracy of the land area without conducting a survey;
- (16) where Ministerial consent to any agreement or dealing in relation to the Tenements is being or will be sought, we express no opinion as to whether such consent will be granted or the consequences of it being refused;
- (17) we have assumed that all relevant procedures and requirements for grant of a tenement under the Mining Act were complied with in relation to the Tenements; and
- (18) we have assumed that the accommodation of local staff referred to in the proposed work program set out in Schedule 3 will not involve the construction of permanent buildings.

This Report is limited to the matters expressly contained within it.

## 5 OWNERSHIP OF THE TENEMENTS

- 5.1 As set out in Schedule 1 of the Report, Mota-Engil Investments is the sole holder of the registered interest in EL0670/22 and EL0671/22.
- 5.2 Upon fulfilment of the conditions precedent of the SPA, compliance with all the requirements under the SPA and all applicable laws including the Mining Act in relation to transfer of the Tenements and changes in control of a company holding a tenement as well as effecting the share transfer contemplated under the SPA, the SPV, which will become a wholly owned subsidiary of the Company in accordance with the SPA, will become the holder of the Tenements. See section 10 for details of the SPA.

## 6 THE MINING TENEMENTS GENERALLY

- 6.1 The Tenements comprise of two (2) exploration licences, Number EL0670/22 and Number EL0671/22, granted under the Mining Act.
- 6.2 The holder of the Exploration License Number EL0670/22 and Exploration License Number EL0671/22 is granted exclusive rights to carry out exploration for Heavy Mineral Sands over an area of 865.86 km<sup>2</sup> around Lake Chilwa and over an area of 12.84 km<sup>2</sup> on Chilwa Island on Lake Chilwa in the Southern Region of Malawi.



6.3 For the purposes of this Report, we have reviewed the relevant sections of the Mining Act affecting the status of the Tenements and as such, this Report only considers the Mining Act as it applies to exploration licences (being the Tenements).

#### 6.4 **Exploration Licences**

(1) General ownership provisions concerning mineral tenements:

(a) Section 32 provides that “*except as otherwise provided in this Act, a person **shall not carry on reconnaissance, prospecting, exploration or mining operations, except under and in accordance with a mineral tenement or an artisanal mining permit granted under this Act***”.

(b) In relation to directly holding/owning a mineral tenement in Malawi in general, the requirement is found under section 41 of the Act. Section 41(1)(a) of the Mining Act provides that “*a holder, or an applicant for a mineral tenement shall (a) have, and keep established after the mineral tenement is granted, **a legal address in Malawi which is referred to in this Act as its “registered address”***”.

(c) Under these general provisions, the requirement is that a company must have a legal address referred to as a registered address. Having a registered address in Malawi does not however mean that a company must be incorporated in Malawi. A foreign company seeking to hold a mineral tenement in Malawi can therefore register as a foreign company under the CA in order to have a registered office and registered address. The procedure for registering as a foreign company in Malawi is found under section 360 of the CA.

(2) Requirements to hold an exploration licence (section 116(1) of the Mining Act)

(a) Entities permitted to hold an exploration licence

(i) A company incorporated in Malawi under the CA and a foreign company registered in Malawi under the CA are both eligible to hold an exploration licence.

(ii) Section 116(1) of the Mining Act provides that:

*“An exploration licence holder shall be*

(A) a company, duly incorporated; or

(B) registered as a foreign company,

*under the Companies Act, that has the technical competence and financial ability to fulfil the licence obligations”.*

(b) Prohibitions on holding an exploration licence (section 116(2) of the Mining Act)

(i) Section 116(2) of the Mining Act provides that an exploration licence shall not be granted or transferred to:

(A) “a company—



- *if any director of the company or any major shareholder of the company holding a controlling interest in such company has been convicted of an offence under this Act and sentenced to imprisonment without an option of a fine, or was an authorized officer at the time the company first applied for the grant or transfer of the licence; or*
- *if the company is a former exploration licence holder whose former licence was cancelled and has applied for an exploration area that in whole or in part overlaps the former license exploration area, if such application is made within two (2) years from the date of such licence cancellation; or*

(B) *a registered foreign company, unless it has designated a legal practitioner, licensed to practice law in Malawi, as its registered agent for purposes of accepting notices under this Act and legal service of process under the laws of Malawi”.*

(c) License conditions of an exploration licence under the Mining Act

- (i) Section 120 (c) of the Mining Act provides that an exploration licence shall “state the condition that the holder shall implement the appended [sic] exploration licence work programme”.
- (ii) The work programme referred to in Section 120 (c) of the Mining Act is the work program which must be provided in the application for grant of the exploration licence. Section 117 (1) (d) of the Mining Act provides that an application for the grant of an exploration licence shall be submitted to the Registrar in the prescribed form and manner and shall have attached to it, among other things, a proposed exploration work programme giving particulars of the work proposed to be carried out in the area of land over which the licence is sought.
- (iii) As such, the license conditions of an exploration licence must be read with reference to the work programme contained in the application.

(d) Term of exploration licence

- (i) Section 118 of the Mining Act provides that the initial term of an exploration licence shall be three (3) years.
- (ii) A holder of an exploration licence may apply for an extension of the term of its licence for a period of up to two (2) years.
- (iii) An application for extension of the term of an exploration licence may be made on not more than two (2) occasions.

(e) Obligations of an exploration licence holder

Section 126 of the Mining Act provides that the holder of an exploration licence shall:

- (i) conduct exploration in accordance with its approved exploration work programme, the conditions of its licence, the Mining Act and applicable law, in





- a good and professional manner consistent with good practice in the mining industry;
- (ii) commence exploration fieldwork, where the fieldwork is part of its approved exploration work programme, within one hundred and eighty (180) calendar days of the date of grant of the license;
  - (iii) where the Commissioner requires, provide temporary training attachments, within its operations, to an officer in the Commissioner's office or the Department of Geological Survey for a period not exceeding 30 days;
  - (iv) notify the Commissioner when there is change in the control of the company that holds the licence;
  - (v) pay compensation for damages caused by its work as required under section 225 of the Mining Act;
  - (vi) submit all reports required under the Mining Act;
  - (vii) expend in, on, or in relation to the exploration licence area the minimum annual amount required; and
  - (viii) pay annual ground rentals.
- (f) transfer of an exploration License
- (i) Transfers of mineral tenements are covered under Division 4 of the Mining Act. Section 58 of the Mining Act provides that the "*transfer of a mineral tenement that is transferable, or a tenement that is transferable, shall be of no force or effect, unless the transfer has been approved pursuant to section 59.*"
  - (ii) The procedure for transfer of a transferable Tenement is provided for in section 59 of the Mining Act. Section 59 (1) of the Mining Act provides that the holder of an exploration licence, among others, may apply for the transfer of the license to another party.
  - (iii) Section 59 (2) of the Mining Act provides that an application for transfer under section 59 (1) shall be submitted to the Registrar in the prescribed manner and shall include:
    - (A) an instrument of transfer in the prescribed form;
    - (B) a detailed statement describing the reasons for the requested transfer;
    - (C) an attestation by the transferee that the transferee:
      - has the financial and technical capability to perform all obligations under the tenement and documentation to support the attestation;
      - meets all the eligibility requirements of this Act to hold the type of mineral tenement to be transferred;



- shall assume all liability for acts or omissions that arose out of the obligations of the mineral tenement before the transfer of such title to the transferee; and
  - upon transfer of the mineral tenement, shall assume all obligations imposed on the mineral tenement by this Act, the regulations and the conditions set out in the licence; and
- (D) the prescribed application fee or proof that such fee has been paid. The Mines and Minerals (Mineral Title Fees) Regulations, 2021 provides that the fee for the transfer of a Mineral Tenement License is MWK 250,000.00 (approximately USD 243 based on the rate of exchange prevailing as at the date of this report). Under section 2 of the Mining Act a mineral tenement includes, among others, an exploration license.
- (iv) Section 59(6) of the Mining Act provides that *“in the case of an application to transfer an exploration licence, retention licence, medium-scale mining licence or large-scale mining licence, the Mineral Resources Committee may approve or refuse to approve the application, and an approval may be subject to such conditions as the Committee considers necessary in the circumstances”*.
- (v) Section 59 (7) provides that the Mineral Resources Committee shall give its approval to the transfer of, among others, an exploration licence where the transferee:
- (A) is a person controlling, controlled by, or under common control with, the transferor;
  - (B) is a person eligible under this Act to hold that type of mineral tenement;
  - (C) has provided the attestations required in 6.4 (2) (f) (iii) (C) above; and
  - (D) has demonstrated to the satisfaction of the Committee that transferee has the financial and technical capability to perform all obligations under the tenement.
- (vi) Section 59 (8) requires that the Registrar notify a transferee and reissue the license in the name of the transferee within fourteen (14) calendar days of the approval by the Mineral Resources Committee, of the Application.
- (vii) Section 59 (10) of the Mining Act provides that where an application to transfer a mineral tenement is refused under subsection (6), the Registrar shall, within fourteen (14) calendar days, notify the applicant that his application is refused and the reasons for the refusal.
- (g) Change in control of company holding a mineral tenement
- (i) Section 63 of the Mining Act provides that *“Where a mineral tenement is held by a company and there is a change in the control of the company occasioned by a sale of a majority a majority ownership interest or a majority of its shares, the*



*holder of the mineral tenement shall, within fourteen (14) calendar days, notify the Commissioner.”*

- (ii) The Mining Act does not state what action the Commissioner is required to take upon receive notification from a company holding a mineral tenement of a change of control in the company occasioned by a change in a majority ownership of its shares.

(h) Rights to explore

- (i) Section 125 of the Mining Act provides that “*Subject to this Act, the conditions stipulated in the licence and applicable law, an exploration licence, while it remains valid and in effect, confers on the holder of the licence the exclusive right to conduct exploration in the licence area in accordance with its approved exploration work programme.*”
- (ii) *Without limiting the generality of subsection (1), a holder of an exploration licence shall have the right, within its licence area, to-*
  - (A) *search for all types of minerals and mineral occurrences;*
  - (B) *apply on an exclusive first-come, first-considered basis for retention licence or mining licence;*
  - (C) *erect camps and temporary buildings;*
  - (D) *erect installations in any waters for exploration purposes;*
  - (E) *remove any camps, temporary buildings or installations the holder erected;*
  - (F) *fly over the area for the purpose of performing geophysical or other aerial surveys;*
  - (G) *use remote sensing to gather data and useful information to understand the area's geological, environmental and geographical attributes;*
  - (H) *enter upon any part of the licence area for the purpose of carrying out exploration on that land;*
  - (I) *request a land access order pursuant to section 230;*
  - (J) *conduct drilling, trenching and pitting works;*
  - (K) *take and remove specimens and samples not exceeding such limit as is required for exploration and to analyse said specimens;*
  - (L) *surrender part or all of the licence area subject to meeting the surrender requirements imposed under this Act; and*
  - (M) *do all other things necessary or expedient for the undertaking of exploration on the land.*



- (iii) Exploration means “...any manner or method of exploring for the purpose of locating and evaluating mineral deposits and occurrences, to determine their characteristics, extent and economic value including bulk sampling, preparation of prefeasibility and feasibility studies and related laboratory testing, and such other operations necessary to identify, evaluate and prepare to apply for a mining licence;”
- (iv) The approved exploration work program for the Tenements consists of the following:

**Year**

**Activity**

Year 1. **Team composition and mobilizing**

- Further and continued geological desk-top baseline information collection and literature review especially what GSD already performed.
- Analysis of results from available airborne Geo-Survey results to augment our targets.
- Target area selection, synthetization, and compilation
- Detailed ground and geologic mapping, infilling drilling, and torching exercises,
- Preliminary reporting on JORC exploration targets.

Year 2. **Drilling of JORC level anomalous selected sites.**

- Collection of sub-surface samples as well as lithological analysis.
- Detailed resource modelling, calculation, and evaluation.
- Commencement of preliminary Techno-economic pre-feasibility studies

Year 3. **Engineering studies**

- Financial and Economic modelling.
- Equipment and plant selection
- Application for mining licence
- Full EIA studies.
- Developing and discussing with Government on Mining Development Agreement (MDA).
- Project finance sourcing assuming viability.

**Minimum expenditure required in connection with the approved Exploration Program**

<b>Year</b>	<b>Amount in Malawi Kwacha [MK]</b>	<b>US\$ Equivalent</b>
Year 1	MK 220,000,000.00	US\$200,000
Year 2	MK 220,000,000.00	US\$200,000
Year 3	MK 385,000,000.00	US\$ 350,000
<b>Total minimum expenditure</b>	<b>MK 825,000,000.00</b>	<b>US\$ 750,000</b>



## 6.5 Tenement Terms and Conditions

- (1) Some of the salient aspects of the Tenements are set out in Schedule 1.
- (2) The terms and conditions of the Tenements are set out in the exploration licenses reproduced as Schedule 1 (a) and Schedule 1 (b) hereto.
- (3) Mining tenements in Malawi are granted subject to various standard conditions prescribed in the Mining Act, including those set out in section 6.4 (2) (f) of this Report.
- (4) If a tenement holder fails to comply with the terms and conditions of a license, section 126 (2) of the Mining Act provides that the Commissioner may suspend or cancel the license.
- (5) Exploration licenses in Malawi are also subject to the Environment Management Act (Cap. 60:02 of the Laws of Malawi), the details of which are outside the scope of this Report.

## 6.6 Suspension and Cancellation of Exploration Licences

- (1) Section 79 (1) of the Mining Act provides that the Commissioner for Mines and Minerals (“**Commissioner**”) may, by notice in writing served on the holder of the mineral tenement licence, suspend or cancel the licence, where the holder of the mineral tenement licence:
  - (a) fails to use, in good faith, the land the subject of its licence for the purpose for which the licence was granted;
  - (b) uses that land subject of its licence for any purpose other than the purpose for which its licence was granted;
  - (c) fails to comply with any requirement of the Mining Act (not being exempted under the Mining Act from doing so) with which it is bound to comply;
  - (d) fails to comply with a condition of its licence (not being exempted under the Mining Act from doing so);
  - (e) fails to comply with a direction lawfully given under Mining Act or with a condition on which any certificate of surrender is issued or on which any exemption or consent is given under the Mining Act;
  - (f) fails to comply with the conditions relating to the exercise of its rights under its licence;
  - (g) fails to pay any amount payable by the licence holder under the Mining Act within two (2) months of the amount becoming due. The Commissioner shall not suspend or cancel a licence on this ground if, before the date specified in a notice referred to in section 79 (3) of the Mining Act, the holder of the licence pays the amount of money concerned together with an amount of interest, if any, which the Commissioner considers reasonable in all the circumstances of the case; or
  - (h) does or fails to do anything specified in Mining Act where the respective provision of Mining Act requires suspension or cancellation.
- (2) Section 79 (3) of the Mining Act provides that the Commissioner shall not suspend or cancel a licence, based on the grounds set out in Section 79 (1) of the Mining Act, other than an emergency suspension order as provided under section 23, unless:



- (a) the Commissioner has, by notice in writing served on the holder of the licence, not giving less than thirty (30) days' notice of the Commissioner's intention to suspend or cancel the licence on that ground;
  - (b) the Commissioner has, in the notice, specified a date before which the holder of the licence, in writing, may submit any matter which he wishes the Commissioner to consider; and
  - (c) the Commissioner has taken into account:
    - (i) any action taken by the holder of the licence to remove that ground or to prevent the recurrence of similar grounds; and
    - (ii) any matters submitted to the Commissioner by the holder of the mineral tenement pursuant to paragraph (b).
- (3) Section 79 (5) of the Mining Act provides that the Commissioner shall not, under Section 79 (1) of the Mining Act, cancel, among others, an exploration licence unless the Commissioner has first referred the matter to the Mineral Resources Committee and the Committee has approved the cancellation.
- (4) Where the Commissioner refers an exploration licence for cancellation to the Mineral Resources Committee because the licence holder failed to meet its annual minimum exploration expenditure obligation under section 127(1) of the Mining Act:
- (a) the Committee in making its decision shall consider whether the licence holder failed to do so through no fault of his own, such as its inability to access the licence area because of landowner or permission issues, or whether his failure was due to inadequate financial resources or a fault within his control; and
  - (b) where the Committee determines that the failure of an exploration licence holder to meet its annual minimum exploration expenditure obligation was due to a fault of the licence holder or that the licence holder has inadequate financial resources to meet the obligation, the Committee shall, without exception, determine that the Commissioner shall cancel the licence.
- (5) Section 79 (7) of the Mining Act provides that The Commissioner may, by notice in writing served on the holder of a mineral tenement, cancel the holder's licence if, where the holder is a body corporate, an order is made or a resolution is passed winding up the affairs of the corporation, unless the winding-up is for the purpose of amalgamation or reconstruction and the Commissioner has been given notice thereof.
- (6) Where two or more persons constitute the holder of a mineral tenement, the Commissioner shall not, under section 79 (7) of the Mining Act, cancel the licence on the occurrence, in relation to one or only some of the persons constituting the holder, of an event entitling the Commissioner to so cancel the licence, unless the Commissioner is satisfied that any other person or persons constituting the holder are unwilling, or would be unable, to carry out the duties and obligations of the holder of the licence.
- (7) A person, who fails to comply with a suspension order issued under this section commits an offence and shall, upon conviction, be liable to a daily fine of K1,000,000.00 (approx. USD 1000)



commencing on the date that the suspension order was to be effective, and to imprisonment for ten (10) years.

#### 6.7 **Exchange Control provisions affecting the SPA**

- (1) Malawi has an exchange control regime which, among other things regulates, the purchase and sell (exchange) of any currency and the acquisition of securities of Malawian companies (including shares) by non-residents of Malawi as well as the acquisition and disposal of foreign securities by residents of Malawi.
- (2) The Exchange Control Regulations, made under the Exchange Control Act, in regulation 18, prohibit, among other things, the transfer of shares in a Malawi company to a non- resident of Malawi (whether a natural person or a corporation) without exchange control approval. Regulation 18 provides that:

*“A person who, without the permission of the Minister, in Malawi:*

- (a) allots, issues, transmits or transfers any securities to a non-resident of Malawi; or*
- (b) makes an entry in a register that recognizes or gives effect to the allotment, issue, transmission or transfer of any securities to a non-resident of Malawi, is guilty of an offence...”*

- (3) In practice, exchange control approval is obtained from Foreign Flows Monitoring Department of the Reserve Bank of Malawi (“**RBM**”).
- (4) RBM’s current position is that it cannot grant exchange control approval for, among other things, the transfer of shares in a Malawi company that is yet to be incorporated at the time the application for approval is made.
- (5) As such, based on the forgoing, it is our view that the transfer of the shares of the SPV to the Company, pursuant to the SPA, will be subject to exchange control approval, permitting the transfer, being obtained from RBM. However, it must be noted that, in our view, RBM will only consider an application for such approval once the SPV has been incorporated by Mota-Engil Investments.

#### 7 **LAND**

7.1 The Tenement under license number EL0670/22, as reproduced in Schedule 1 (a), is (as stated in the license number EL0670/22) located over an area of 865.86 square kilometres covering the districts of Phalombe, Zomba, Machinga and Mulanje. The considerations and map sheet of the area are contained in Schedule 1 (a) hereof.

7.2 The Tenement under license number EL0671/22, as reproduced in Schedule 1 (b), is (as stated in the license number EL0671/22) located over an area of 12.84 square kilometres covering Chilwa Island on Lake Chilwa in the district Zomba. The considerations and map sheet of the area are contained in Schedule 1 (b) hereof.

#### 8 **OBJECTIONS TO TENEMENTS APPLICATIONS**

The Mining Search did not show any objections to the Tenements.



## 9 PROPOSED WORK PROGRAM

- 9.1 Each of the Tenements contain a programme of exploration activities as set out in each Tenement (**Programme of Exploration Activities**).
- 9.2 We are informed by the Company, that the Company proposes to carry out the Proposed Work Program in accordance with the Programme of Exploration Activities except for the “Infrastructure Road Works” which is addressed in section 9.3 of this Report.
- 9.3 In the case of undertaking “Infrastructure Road Works”, development permission for construction of roads must be obtained by the Company under the Physical Planning Act of 2016 (as amended by the Physical Planning (Amendment) Act, 2022) (**PPA**). Under the PPA an application for development permission shall:
- (1) be made to a local government authority of the relevant area, where there is a planning committee in the local government authority, or to the Commissioner for Physical Planning (Responsible Authority), where there is no planning committee in the local government authority;
    - (a) include such other information as the Responsible Authority may require;
    - (b) the Responsible Authority may require the application to publish their application in a manner to be prescribed by the Responsible Authority and any person with an interest may make a submission to the Responsible Authority outlining their interest;
    - (c) The Responsible Authority shall, within thirty days of the receipt of an application for development permission, inform the applicant of the decision on the application, or where no decision has been made, of the progress on the application, and the likely date by which a decision will be made, provided that where the Responsible Authority fails to make a decision or to advise the applicant of the progress on the application within sixty days of the receipt of the application for development permission, the applicant shall be at liberty to commence development.

## 10 MATERIAL AGREEMENT AFFECTING THE TENEMENTS

- 10.1 The Company is a party to the SPA, under which Mota-Engil Investments, together with its affiliate Luso, agree to incorporate the SPV, to transfer the Tenements to the SPV and to sell 100% of the shareholding of the SPV to the Company. Under the SPA the Company agrees to purchase 100% of the shareholding of the SPV from Mota-Engil Investments. Some of the material terms of the SPA are set out in Schedule 2 to this Report.
- 10.2 The Company has advised us that, having made enquiries of Mota-Engil Investments, the Company is not aware of any other agreements relating to the obligations, rights and interests of Mota-Engil Investments in relation to the Tenements.

## 11 LITIGATION

In Malawi, to find judgments entered in the High Court of Malawi in relation to Mota-Engil Investments, one must conduct physical searches at the six registries of the High Court of Malawi spread over a distance of about 700 kilometres. The court cases are registered on yearly basis, and one must search from the year of incorporation/registration of the company. Our search was limited to the six registries of the High Court of Malawi over the past 5 years from 2017. We did not carry out a search of any of the





Industrial Relations Court or any Magistrate/Subordinate Courts as that was beyond the scope of our engagement. Please note that Mota-Engil Investments is part of a wider group in Malawi with similar names. Our searches at the High Court Registries however show that there are no litigation cases against Mota-Engil Investments in the past 5 years.

## 12 **CONSENTS AND DISCLAIMER**

12.1 This Report is provided solely for the benefit of the Company and the directors of the Company in connection with the issue of the Proposed Prospectus and is not to be relied on or disclosed to any other person or used for any other purpose or quoted or referred to in any public document without our prior written consent.

12.2 Singano Purshotam Law Consultants consents to being named in the Prospectus as the authors of this Report. Singano Purshotam Law Consultants has given and has not before the lodgement of this Prospectus withdrawn, its consent to the inclusion of this Report in the Prospectus.

12.3 Singano Purshotam Law Consultants:

- (1) has not authorised the issue of the Proposed Prospectus;
- (2) does not make, or purport to make, any representation or statement in the Proposed Prospectus; and
- (3) expressly disclaims and takes no responsibility for any part of the Proposed Prospectus other than a reference to its name, the inclusion of which it has consented to.

## 13 **DISCLOSURE OF INTEREST**

Singano Purshotam Law Consultants will be paid normal and agreed professional fees for the preparation of this Report and related matters.

## 14 **LIMITATION OF LIABILITY**

14.1 If the Company incurs any expenses, damages, losses or liabilities whatsoever (including without limitation, legal fees) in connection with or arising from the provision of our services or as a result of any advice we have given or have failed to give the Company, or any act or omission whether as a consequence of negligence or otherwise, and our liability to the Company as a result is established, our total aggregate liability to the Company for an event or series of connected events shall be limited to our fee charged and actually collected in relation to the provision of such services or advice (“**Maximum Liability**”). Any such liability to the Company will be reduced to the extent:

- (1) the loss or damage for which we are or would otherwise be liable is attributable to fault, negligence, or lack of care on the part of the Company part or any person for whom the Company is responsible; and
- (2) the Company
  - (a) makes a recovery from any other party in respect of the Project or any part of it under the relevant agreement; or
  - (b) has a right of recovery from any other person,

in each case in respect of the same matter, fact, event or circumstance.



- 14.2 We will not be liable for any indirect or consequential losses.
- 14.3 The Company must not enforce any claim (and must consent to a stay of any judgment) against us in connection with the services to the extent to which the claim exceeds the Maximum Liability or exceeds the amount to which our liability to the Company is otherwise reduced under paragraph 14.1. The Company must release us from any liability for any such excess. The Company must ensure that the Company's group companies comply with and abide by this paragraph 14.3.
- 14.4 Notwithstanding the provision of any law relating to the limitation of proceedings, any claim for compensation against us shall be limited and, further, no claim shall be raised if the matter has not been brought to court within twelve months after the facts on which the claim is based are known to the Company or could have been reasonably known to the Company. Further, or moreover, in any event no claim relating to our services or advice shall be brought against us twelve months after the date of such services or advice.
- 14.5 The limitation of liability provisions in clause 14 and its sub-clauses above apply to Singano Purshotam Law Consultants' partners, any future proprietors, partners, employees and/or agents.

15 **GOVERNING LAW**

The construction, validity and performance of our appointment by the Company as the Malawi lawyers in the preparation of this Report shall be governed in all respects by Malawian laws.

Yours faithfully,

*Duncan Singano*

Duncan Singano

**for: SINGANO PURSHOTAM LAW CONSULTANTS**



### SCHEDULE 1 - SUMMARY OF THE TENEMENTS

Tenement	Holder/s	Application Date	Grant Date	Expiry Date	Current Term /Renewed	Area	Registered Caveats /Mortgages	Pending Objections/ Forfeiture Action	Expenditure			Annual Ground Rent	Annual Ground Rent 2022/2023 year	Notes
									Current Year Exp. Commitment	Exp. Lodged	Exemption Lodged			
EL 0670/22	Mota-Engil Investments (Malawi) Limited	28 <sup>th</sup> May 2021	27 <sup>th</sup> September 2022	26 <sup>th</sup> September 2025	Three (3) years	865.86 km <sup>2</sup>	None	None	MK825,000,000.00  Annual expenditure set out in the application is as follows:  Year 1: MK 220,000,000.00;  Year 2: MK 220,000,000.00; and  Year 3: MK 385,000,000.00	None	None	Annual ground rental for an exploration license is payable at a rate of MK 10,000.00 per km <sup>2</sup> for the current term of the license	MK 8,658,600.00 paid under Malawi Government Receipt number 9596447, for period Sept 2022 to Sept 2023	Under Section 126 of the Mining Act exploration fieldwork must commence within one hundred and eighty (180) calendar days of the grant date of the exploration license



Tenement	Holder/s	Application Date	Grant Date	Expiry Date	Current Term /Renewed	Area	Registered Caveats /Mortgages	Pending Objections/ Forfeiture Action	Expenditure			Annual Ground Rent	Annual Ground Rent 2022/2023 year	Notes
									Current Year Exp. Commitment	Exp. Lodged	Exemption Lodged			
EL 0671/22	Mota-Engil Investments (Malawi) Limited	28 <sup>th</sup> May 2021	26 <sup>th</sup> September 2022	25 <sup>th</sup> September 2025	Three (3) years	12.86 km <sup>2</sup>	None	None	MK825,000,000.00	None	None	Annual ground rental for an exploration license is payable at a rate of MK 10,000.00 per km <sup>2</sup> for the current term of the license	MK 128,400.00 paid under Malawi Government Receipt number 9596446 for period Sept 2022 to Sept 2023	Under Section 126 of the Mining Act exploration fieldwork must commence within one hundred and eighty (180) calendar days of the grant date of the exploration license



  
**MALAWI GOVERNMENT**

**Mines and Minerals Act**  
(Act No. 8 of 2019)

**Exploration Licence No. EL0670/22**

*This Licence is granted this 27<sup>th</sup> day of September 2022 by the Government of Malawi, acting through the Minister of Mining*  
*To*  
**MOTA-ENGIL INVESTMENTS (MALAWI) LIMITED**  
*having its registered address at P.O. BOX 31379, CAPITAL CITY, LILONGWE 3, MALAWI*  
*who have duly accepted the terms and conditions attached.*

*This licence grants the licensee the exclusive right to prospect for mineral(s) in the area as described overleaf and outlined in a plan Appendix A, for a term of **THREE** years commencing on the above date with an option to extend the term in accordance with Section 119 of the Mines and Minerals Act.*

*Dated this 27<sup>th</sup> day of September 2022*

  
*Hon. Dr. Albert Mapondera Mbarwala, MP.*  
**Minister of Mining**







### LICENCED AREA AND MINERAL(S)

The licence grants the licensee exclusive rights to carry out exploration for the following mineral(s) of primary interest: **HEAVY MINERAL SANDS** over an area of **865.86 Km<sup>2</sup> (square kilometres)** described by the following coordinates (Arc 1950/UTM Zone 36 South):

Licensed area: **BLANTYRE AND LIWONDE MAP SHEETS 1:250,000 MAP SERIES**

POINT	EASTING	NORTHING	POINT	EASTING	NORTHING
1	771062	8261346	34	809752	8342426
2	772096	8293398	35	809729	8342382
3	766600	8293400	36	809657	8342250
4	766600	8303000	37	809634	8342206
5	763600	8310800	38	809612	8342161
6	763600	8319400	39	809593	8342115
7	772800	8325000	40	809576	8342068
8	772800	8328000	41	809558	8342016
9	771000	8330200	42	803800	8344200
10	766000	8330200	43	792400	8344200
11	766000	8335000	44	778000	8340400
12	767200	8335800	45	772800	8336000
13	767200	8336800	46	771200	8333200
14	768600	8337800	47	771600	8330200
15	770400	8335600	48	773400	8328000
16	773400	8338200	49	773400	8325000
17	771600	8339800	50	771800	8321400
18	784917	8347080	51	768600	8319800
19	789743	8347306	52	771800	8315200
20	789688	8348000	53	770000	8307800
21	812376	8348000	54	771800	8306600
22	812054	8347311	55	771000	8300400
23	811944	8347087	56	773000	8298800
24	811879	8346951	57	777600	8300200
25	811815	8346816	58	778400	8298600
26	811586	8346315	59	780727	8291396
27	811523	8346180	60	786349	8288618
28	811435	8346000	61	788995	8284253
29	811024	8345143	62	795272	8283208
30	810855	8344781	63	801217	8283810
31	810404	8343833	64	799874	8282782
32	810321	8343651	65	799874	8283224
33	809796	8342516			





## Appendix A

### TERMS AND CONDITIONS

The licensee shall:

#### 1. Programme of Exploration Activities

1.1 Carry out with expedition and diligence the following programme of exploration activities as set out in the licensee's application.

- (a) Literature review and analysis of Airborne Geophysical Survey results
- (b) Target area selection, synthetisation and compilation
- (c) Detailed ground geological mapping, infill drilling and trenching
- (d) Sub-surface sampling and lithological analysis
- (e) Financial and economic modelling

1.2 Commence operations within one hundred and eighty (180) calendar days from the grant of the licence.

1.3 Carry out community consultations within the tenement area through the District Council and other relevant stakeholders prior to commencement of any exploration activities.

1.4 The expenditure of the licensee in the period, in or in relation to, the licenced area shall not be less than the forecast amount of MK825,000,000.00. The minimum expenditure required to be spent annually in connection with an approved exploration work programme shall be as prescribed.

#### 2. Employment and Training of Malawi Citizens by licensee

2.1 Endeavor to employ and train citizens of Malawi for the exploration activities.

2.2 Be permitted to employ non-citizens in a post only if the skills required in that post are not obtainable by recruitment of a citizen of Malawi.

#### 3. Purchase of local goods

3.1 Use and purchase goods and services supplied and produced or manufactured in Malawi wherever they can be obtained at competitive terms, and are in substantive respects of quality comparable with those available from outside Malawi;

3.2 Make maximum use of local subcontractors where services of same comparable standards with those obtained elsewhere are available from them at competitive prices and competitive terms.

3.3 When it is necessary to import vehicles, machinery, plant or equipment and any such items, effect the purchase of the items through traders operating in Malawi, at competitive prices.

#### 4. Further covenants by licensee

4.1 Comply with all conditions imposed under Part VI – Exploration Licence (Section 116 to Section 133) of the Mines and Minerals Act (Act No. 8 of 2019);

4.2 Keep all measures necessary for the conservation and protection of the environment;

4.3 Fill in, seal or fence-off deep pits, trenches, shafts and excavations;

4.4 Re-instate, level, re-grass and replant any part of the licenced area which may have been damaged by the licensee's prospecting operations;

4.5 Keep the Government of Malawi indemnified against all actions, claims and demands, which may be brought or made against it by reason of anything done by the licensee, licensee's servants, agents or contractors;

4.6 Submit annual exploration expenditure report, mid-year progress report, annual end of year technical report, and any other report that may be required under the Act;

4.7 Not pollute the environment, in particular, streams or rivers.

4.8 Comply with all obligations imposed under or by virtue of any Act of Parliament for the time being in force.

#### Cancellation

Nothing in Section 79 of Mines and Minerals Act (Act No. 8 of 2019); shall affect any power exercisable by the Commissioner for Mines and Minerals under any other law to cancel the licence.

#### Declaration by Licensee:

I consent to the terms and conditions set forth.

Name: ANTONIO PIMENTA DA SILVA

Signature: 

Designation: DIRECTOR

Date: 27/09/2022



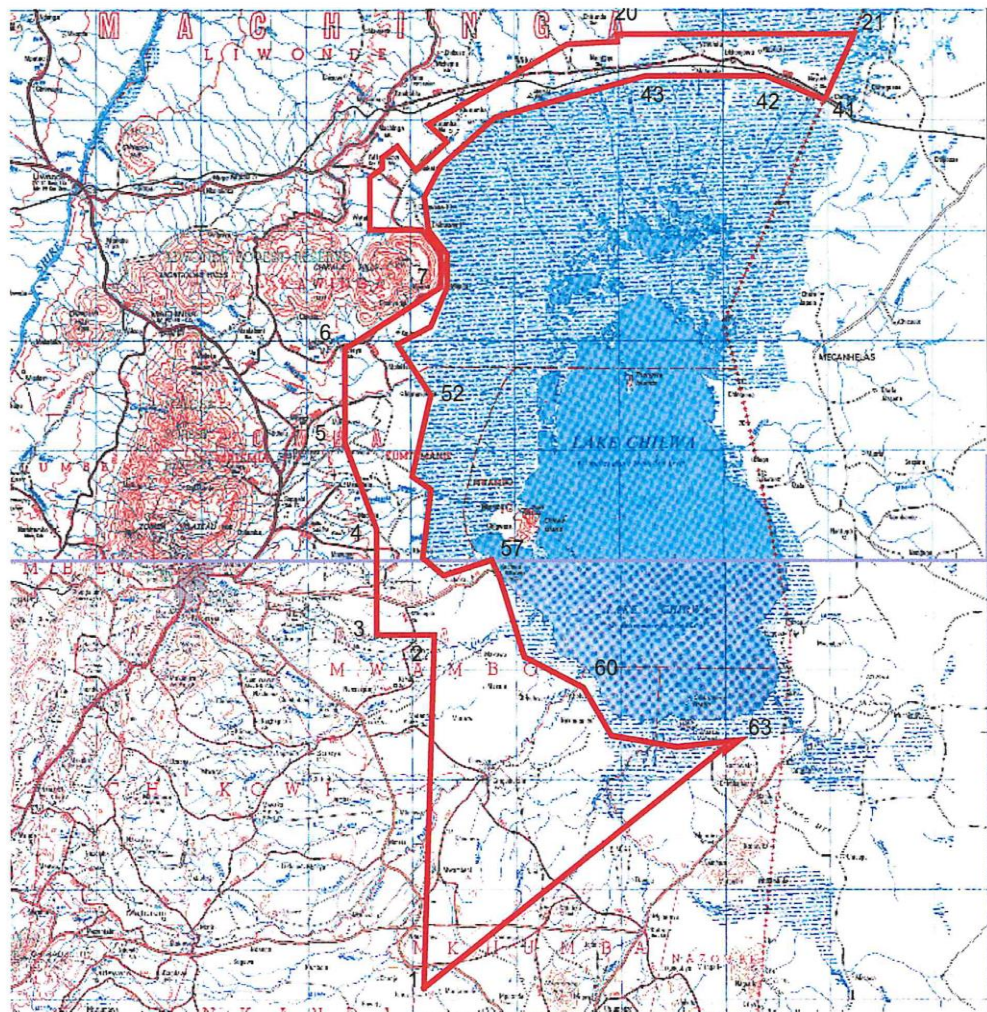




**MOTA-ENGIL INVESTMENTS (MALAWI) LIMITED -EL0670/22**

**PHALOMBE, ZOMBA, MACHINGA AND MULANJE**

BLANTYRE AND LIWONDE MAP SHEETS 1:250,000 MAP SERIES



EL0670/22





**MALAWI GOVERNMENT**

**Mines and Minerals Act**  
(Act No. 8 of 2019)

**Exploration Licence No. EL0671/22**

*This Licence is granted this 26<sup>th</sup> day of September 2022 by the Government of Malawi, acting through the Minister of Mining*

*To*

***MOTA-ENGIL INVESTMENTS (MALAWI) LIMITED***

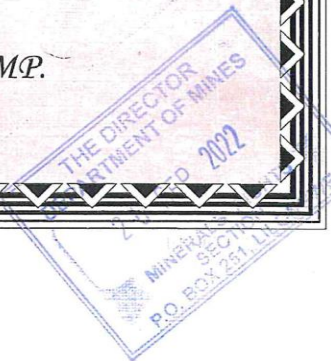
*having its registered address at P.O. BOX 31379, CAPITAL CITY, LILONGWE 3, MALAWI*

*who have duly accepted the terms and conditions attached.*

*This licence grants the licensee the exclusive right to prospect for mineral(s) in the area as described overleaf and outlined in a plan Appendix A, for a term of **THREE** years commencing on the above date with an option to extend the term in accordance with Section 119 of the Mines and Minerals Act.*

*Dated this 26<sup>th</sup> day of September 2022*

*Hon. Dr. Albert Mapondera Mbawala, MP.*  
***Minister of Mining***



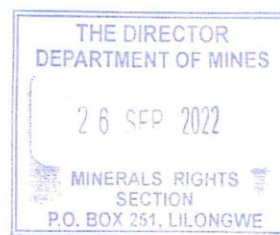


### LICENCED AREA AND MINERAL(S)

The licence grants the licensee exclusive rights to carry out exploration for the following mineral(s) of primary interest: **HEAVY MINERAL SANDS** over an area of **12.84 Km<sup>2</sup> (square kilometres)** described by the following coordinates (Arc 1950/UTM Zone 36 South):

Licensed area: **LIWONDE MAP SHEET 1:250,000 MAP SERIES**

POINT	EASTING	NORTHING
A	778194	8304902
B	779337	8305838
C	781796	8305043
D	782373	8304510
E	782590	8304031
F	782384	8303509
G	782384	8302900
H	781296	8301322
I	780066	8301953
J	779609	8301703
K	779076	8301779
L	778934	8301996
M	779174	8302377
N	778956	8302932
O	778956	8303455



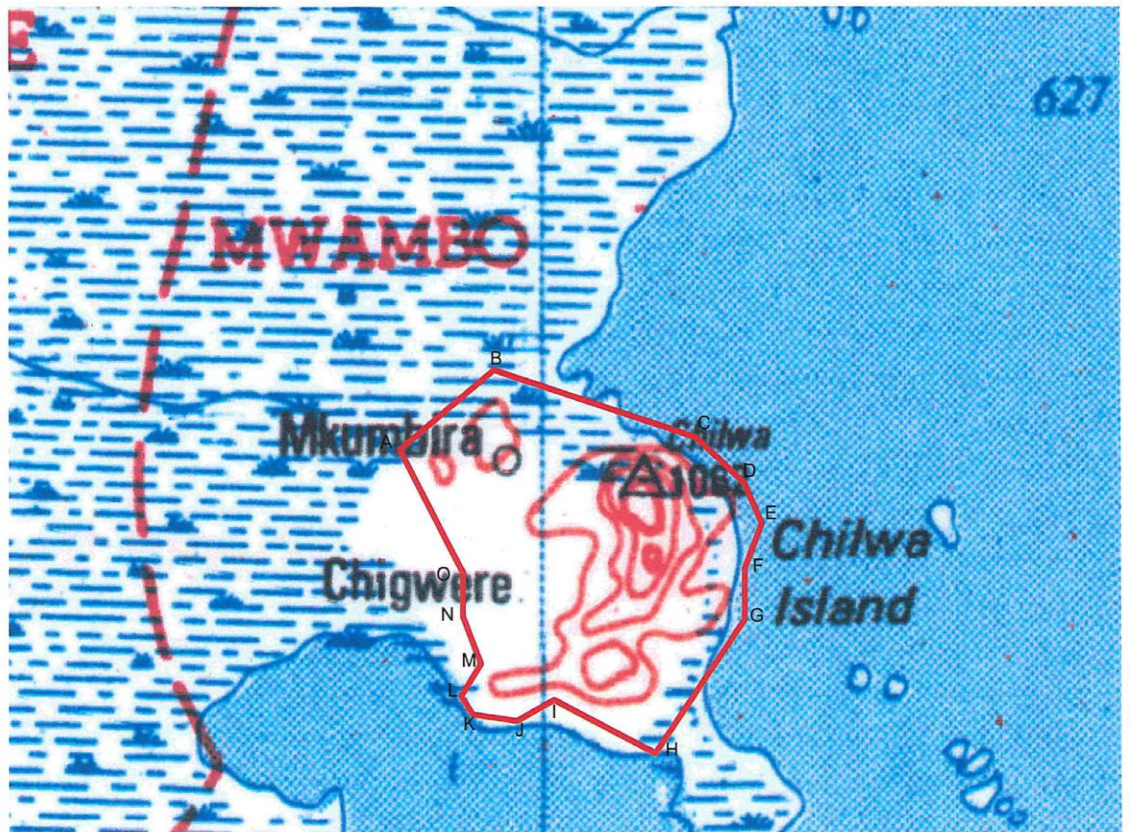




*MOTA-ENGIL INVESTMENTS (MALAWI) LIMITED -EL0671/22*

**ZOMBA**

LIWONDE MAP SHEET 1:250,000 MAP SERIES



EL0671/22



## Appendix A

### TERMS AND CONDITIONS

The licensee shall:

#### 1. Programme of Exploration Activities

1.1 Carry out with expedition and diligence the following programme of exploration activities as set out in the licensee's application.

- (a) Literature review and analysis of Airborne Geophysical Survey results
- (b) Target area selection, synthesis and compilation
- (c) Detailed ground geological mapping, infill drilling and trenching
- (d) Sub-surface sampling and lithological analysis
- (e) Financial and economic modelling

1.2 Commence operations within one hundred and eighty (180) calendar days from the grant of the licence.

1.3 Carry out community consultations within the tenement area through the District Council and other relevant stakeholders prior to commencement of any exploration activities.

1.4 The expenditure of the licensee in the period, in or in relation to, the licenced area shall not be less than the forecast amount of **MK825,000,000.00**. The minimum expenditure required to be spent annually in connection with an approved exploration work programme shall be as prescribed.

#### 2. Employment and Training of Malawi Citizens by licensee

2.1 Endeavor to employ and train citizens of Malawi for the exploration activities.

2.2 Be permitted to employ non-citizens in a post only if the skills required in that post are not obtainable by recruitment of a citizen of Malawi.

#### 3. Purchase of local goods

3.1 Use and purchase goods and services supplied and produced or manufactured in Malawi wherever they can be obtained at competitive terms, and are in substantive respects of quality comparable with those available from outside Malawi;

3.2 Make maximum use of local subcontractors where services of same comparable standards with those obtained elsewhere are available from them at competitive prices and competitive terms.

3.3 When it is necessary to import vehicles, machinery, plant or equipment and any such items, effect the purchase of the items through traders operating in Malawi, at competitive prices.

#### 4. Further covenants by licensee

4.1 Comply with all conditions imposed under Part VI – Exploration Licence (Section 116 to Section 133) of the Mines and Minerals Act (Act No. 8 of 2019);

4.2 Keep all measures necessary for the conservation and protection of the environment;

4.3 Fill in, seal or fence-off deep pits, trenches, shafts and excavations;

4.4 Re-instate, level, re-grass and replant any part of the licenced area which may have been damaged by the licensee's prospecting operations;

4.5 Keep the Government of Malawi indemnified against all actions, claims and demands, which may be brought or made against it by reason of anything done by the licensee, licensee's servants, agents or contractors;

4.6 Submit annual exploration expenditure report, mid-year progress report, annual end of year technical report, and any other report that may be required under the Act;

4.7 Not pollute the environment, in particular, streams or rivers.

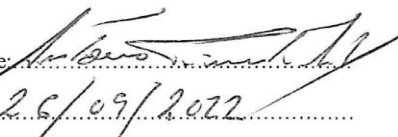
4.8 Comply with all obligations imposed under or by virtue of any Act of Parliament for the time being in force.

#### Cancellation

Nothing in Section 79 of Mines and Minerals Act (Act No. 8 of 2019); shall affect any power exercisable by the Commissioner for Mines and Minerals under any other law to cancel the licence.

#### Declaration by Licensee:

I consent to the terms and conditions set forth.

Name: ANTONIO PIMENTA DA SILVA Signature: 

Designation: DIRECTOR Date: 26/09/2022



H1.0671/22



## **SCHEDULE 2 – CONTRACT SUMMARY**

### **THE SPA**

The material terms of the SPA are as follows:

- (1) **(Sale Shares)** Mota Engil Investments shall sell, free and clear from any Encumbrance (other than any Permitted Encumbrance), and the Company shall buy shares in the SPV that represent 100% of the issued share capital in the SPV.
- (2) **(Consideration)** The consideration to be paid for the Sale Shares under the SPA is:
  - (a) 19,000,000 fully-paid ordinary shares in the Company)
  - (b) 18,750,000 performance rights convertible into shares of the Company on the terms set out in the terms of Company’s Performance Rights in Schedule 2 of the SPA;
  - (c) the Company covenanting in favour of Mota-Engil Investments to fulfil its post completion obligations under clause 7.1 of the SPA.

The above is collectively referred to as (“**Consideration**”) in this summary.

- (3) **(Escrow)** Mota-Engil Investments:
  - (a) acknowledges that, in accordance with the listing rules of the Australian Stock Exchange, it may not Dispose of the Consideration for 24 months from the date the Company’s shares are admitted for quotation on ASX; and
  - (b) agrees not to Dispose of 50% of the Consideration for a further 12 months in addition to that period required by the Listing Rules.
- (4) **(Terms of Company’s Performance Rights)** the Company shall issue 18,750,000 performance rights convertible into shares upon achievement of the relevant Performance Hurdle, at an issue price of AU\$ 0.0001 per performance right. The performance hurdles and conversion shall be as follows:
  - (a) 7,500,000 Performance Rights shall convert to 7,500,000 Shares upon achievement of the Company announcing a JORC compliant Indicated Resource of 3 million tonnes THM from the Project by no later than 24 months from the grant of the performance right (Class A Performance Hurdle);
  - (b) 3,750,000 Performance Rights shall convert to 3,750,000 Shares upon achievement of the Company announcing the completion of a Feasibility Study (as defined in the JORC Code) that recommends further proceeding with the Project by no later than 48 months from the grant of the performance rights (Class B Performance Hurdle);
  - (c) 3,750,000 Performance Rights shall convert to 3,750,000 Shares upon achievement of the Company announcing the completion of a Feasibility Study (as defined in the JORC Code) that recommends further proceeding with the Project by no later than 48 months from the grant of the performance rights (Class C Performance Hurdle); and





- (d) 750,000 Performance Rights shall convert to 3,750,000 Shares upon achievement of the Company announcing that a decision to mine the Project has been made by no later than 60 months from the grant of the performance rights (Class D Performance Hurdle).
- (5) **(Conditions Precedent)** Completion under the SPA is conditional on:
- (a) Luso obtaining either a written notice under the Australian Foreign Acquisition and Takeovers Act 1975 (“**FATA**”) by or on behalf of the Treasurer (or his delegate) stating that, or to the effect that, the Commonwealth Government does not object to the acquisition of the Consideration Securities (or any other securities in the Company which Luso or its Affiliates hold) by Luso being either on an unconditional basis or subject only to terms as may be acceptable to Luso (acting reasonably) or following notice of the proposed acquisition of the Consideration by Luso, the Treasurer ceases to be empowered to make any order under Part 3 of the FATA because of the expiry of the applicable statutory period in which the Treasurer is empowered to make any order;
  - (b) The Company receiving applications to subscribe for its shares in connection with the IPO with an aggregate subscription price of at least AU\$8,000,000 and the Company receiving AU\$8,000,000 subscription monies for its shares;
  - (c) The Company receiving a letter from the Australian Securities Exchange confirming that the Australian Securities Exchange grants conditional Listing approval to the Company (Conditional Approval Letter), on conditions which are acceptable to Mota-Engil Investments and the Company (each acting reasonably);
  - (d) The SPV being duly incorporated in Malawi in a form and on terms (including its constituent documents) acceptable to Mota-Engil Investments and the Company, each acting reasonably, and evidence of its incorporation being provided to the Company;
  - (e) Mota-Engil Investments obtaining all Authorisations relating to any regulatory requirements by any Government Agency in relation to the transfer of the Tenements to the SPV and the sale of the shares of the SPV as contemplated by SPA on terms acceptable to Mota-Engil Investments and the Company, each acting reasonably;
  - (f) Mota-Engil Investments transferring all rights, title and interest in the Tenements to the SPV on terms acceptable to Mota-Engil Investments and the Company, each acting reasonably;
  - (g) The execution of the service deed to be entered into between Mota-Engil Investments or its Related Body Corporate, the SPV and the Company in an agreed form; and
  - (h) The Company’s constitution being amended to remove any right of the chairman of the Board to a casting vote at Board meetings and meetings of shareholders of the Company, in a form satisfactory to Mota-Engil Investments, acting reasonably.



If the Conditions are not satisfied or waived on or before the End Date or are breach breached or becomes incapable of satisfaction prior to the 31<sup>st</sup> May 2023, or such later date as agreed by the parties in writing, then the SPA may be terminated by notice.

(6) **(The Company’s rights and obligations before completion)** The Company must, from date of commencement of the SPA and:

- (a) the date of completion, not issue any of its own shares or any other security in the Company other than the issue of the Consideration at the date of completion;
- (b) the date on which the Company is admitted to the official list of the Australian Stock Exchange (“**Listing**”), the Company must:
  - (i) subject to the obligation set out in paragraph 5 (a) of this summary, not, without the written consent of Mota-Engil Investments, issue any the Company’s shares or any other security in the Company other than as required under this agreement or in connection with the IPO;
  - (ii) promptly provide to Mota-Engil Investments with all material information in relation to the Listing or the IPO including any material communication or dealing with the Australian Stock Exchange;
  - (iii) provide draft copies of the prospectus which is being prepared in connection with the IPO and Listing to Mota-Engil Investments and consult with Mota-Engil Investments and consider in good faith any comments Mota-Engil Investments has on the form and content of the information being provided in the prospectus. The parties acknowledge that Mota-Engil Investments and its Representatives take no responsibility for, and have no liability in relation to, any of the information contained in the prospectus; and
  - (iv) use best endeavours to complete the IPO and the Listing in accordance with the indicative timetable for the IPO and Listing set out in the Schedules of the SPA.

(7) **(The Company’s obligations at and following completion)**

- (a) On or before Completion, the Company must:
  - (i) issue the Consideration to Luso, as directed by Mota-Engil Investments;
  - (ii) procure that the name of Luso is entered into the register of members of the Company in respect of the Consideration;
  - (iii) provide all consents and information required for Mota-Engil Investments to comply with its obligations to appoint to the SPV the officers requested by the Company;
  - (iv) deliver to Mota-Engil Investments a counterpart of the restriction deed; and
  - (v) do all other things necessary or desirable to issue the Consideration to Luso.



- (b) The Company must, as soon as practicable following the date of completion, deliver to Luso a holding statement showing Luso as the holder of the Consideration Securities.
- (8) **(The Company’s post-completion obligations)** following completion the Company:
- (a) must, during the two (2) year period following Listing, expend at least AU\$4,500,000 on exploration activities in respect of the Lake Chilwa Project comprising the Tenements (“**Minimum Exploration Amount**”);
  - (b) can propose, to Mota-Engil Investments, amendments to the Minimum Exploration Amount and timeline to expend the Minimum Exploration Amount
- (9) **(Mota-Engil Investments and the SPV’s rights and obligations before completion)** between the date of commencement of the SPA and the earlier of the date of completion or the date of termination of the SPA, Mota-Engil Investments must ensure that:
- (a) Mota-Engil Investments and the SPV:
    - (i) do not relinquish any part of the Tenements or their interests in the Tenements;
    - (ii) maintain the Tenements in good standing and any Tenements or Authorisations that are due to expire before Completion are renewed;
    - (iii) not Dispose of or allow any Encumbrance (other than a Permitted Encumbrance) to be granted over, or allow an option to be granted to any other person over, all or any part of the Tenements or their interest in the Tenements;
    - (iv) does not grant any interest to any other party (including an Affiliate) with respect to the Tenements including any royalty interest (or any interest having a similar economic effect as a royalty interest); and
    - (v) use best endeavours to comply with all applicable laws in respect of the Tenements and any direction validly given by any Government Agency in relation to the Tenements; and
  - (b) the SPV does not:
    - (i) incur any financial indebtedness, grant any loans, or give any guarantee or indemnity in respect of the obligations of any person;
    - (ii) allot or issue or agree to allot or issue any security, such as an option, a share or any security convertible into a share in the capital of the SPV other than to Mota-Engil Investments;
    - (iii) alter or agree to alter its constitution or pass any other members' resolution; and
    - (iv) authorise or agree (conditionally or otherwise) to do any of the things which it is prevented from doing under this clause.
  - (c) Mota-Engil Investments and the SPV are not restricted from doing anything:





- (i) to reasonably and prudently respond to an emergency or disaster (including a situation giving rise to a risk of personal injury or damage to property);
  - (ii) that is necessary for any of them to meet any obligation under this agreement or other legal obligations;
  - (iii) that is Fairly Disclosed to the Company prior to the date of this agreement;
  - (iv) expressly disclosed in, or permitted or contemplated by this agreement; or
  - (v) consented to by the Company in writing.
- (10) **(Mota-Engil Investments' obligations at completion)** On or before completion, Mota-Engil Investments must:
- (a) deliver, or cause to be delivered, to the Company:
    - (i) a duly executed transfer of the SPV shares in favour of the Company in registrable form (except for the impression of any Duty or other Taxes of a similar nature) duly executed by Mota-Engil Investments together with the share certificates for the SPV shares;
    - (ii) leave, at the offices of the SPV, original copies of all books, files, reports, financial and other records, documents, correspondence, information, accounts and data (whether machine readable or in printed form) owned by or relating to the SPV
    - (iii) executed resignations of each director and company secretary (as applicable) of the SPV, other than Ricardo Almeida, in a form in which the person resigning acknowledges that he or she has no Claim of any kind against the SPV (including any Claim for salary, fees, loss of office or any loan); and
    - (iv) a counterpart of a restriction deed, in the customary form required by the Australian Stock Exchange (being Appendix 9A of the listing rules of the Australian Stock Exchange), restricting the Disposal of the Consideration for the periods as set out in to below in paragraph [] of this summary clause 4.3, duly executed by Luso;
- (11) **(Failure to complete and non-compliance)** If a party fails to satisfy any obligations for completion, the other party may give the defaulting party notice requiring them to satisfy their obligations within a period of 5 Business Days. If the defaulting party fails to comply with the notice, the non-defaulting party may:
- (a) defer Completion;
  - (b) seek specific performance of the SPA;
  - (c) proceed to Completion so far as practicable; or
  - (d) terminate the SPA.



In any case, the non-defaulting party may seek damages for the default.

- (12) **(Governing law)** The SPA and any dispute arising out of or in connection with the subject matter of the SPA will be governed by the laws of the State of Western Australia.
- (13) **(Other)** The SPA includes other terms, including warranties, board nomination rights, limitation of claims, confidentiality and termination clauses



### **SCHEDULE 3 – PROPOSED WORK PROGRAM**

<b>Activity</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Total</b>
<u>Assays &amp; Metallurgical</u>	<u>741,000</u>	<u>447,000</u>	<u>1,188,000</u>
<u>Bulk Sampling</u>	<u>100,000</u>	-	<u>100,000</u>
<u>Drilling</u>	<u>968,000</u>	<u>640,000</u>	<u>1,608,000</u>
<u>ESIA</u>	<u>290,000</u>	<u>145,000</u>	<u>435,000</u>
<u>ESS</u>	<u>54,000</u>	-	<u>54,000</u>
<u>Geological Staff and field technicians</u>	<u>197,000</u>	<u>221,000</u>	<u>418,000</u>
<u>Infrastructure / Road Works</u>	<u>60,000</u>	<u>50,000</u>	<u>110,000</u>
<u>Radio Metrics</u>	<u>95,000</u>	-	<u>95,000</u>
<u>Resource Model &amp; CP</u>	-	<u>138,000</u>	<u>138,000</u>
<u>Splitting Assays</u>	<u>66,000</u>	<u>66,000</u>	<u>132,000</u>
<u>Transport of Assays</u>	<u>51,000</u>	<u>51,000</u>	<u>102,000</u>
<u>Travel/Accom/Local Staff</u>	<u>60,000</u>	<u>60,000</u>	<u>120,000</u>
<b>Total</b>	<b><u>\$2,682,000</u></b>	<b><u>\$1,818,000</u></b>	<b><u>\$4,500,000</u></b>